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ABSTRACT

As an extension to the development of the Student Accountability Model (SAM), California's vocational student follow-up system, a procedure for obtaining employer feedback information that could assist with occupational program review and evaluation was designed and tested. The design plan included the development of a consortium of community leaders and employers of community college occupational students that established needs, advised on and reviewed the preliminary field-test model, and reviewed test experiences and finding. Four college districts participated in field-testing, with six colleges and nine career programs represented. Identification of employers was dependent on following-up students who participated in SAM, a process hindered by student mobility, necessitating multiple contact methods. Survey design varied by district, but all survey instruments included technical and general knowledge areas, overall student employee performance, and solicited open comments from employers. The document details the systems, methods, and findings from each participating district, presented as separate appended reports. Instructions for participating colleges and sample questionnaires are also appended. (RT)

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California Community Colleges
Chancellor's Office

San Jose Community College District

Cooperating Community Colleges

SAM

**STUDENT
ACCOUNTABILITY
MODEL**

PROJECT SAM
EMPLOYER FOLLOW-UP

Project Number 43-69658-C-010

SPONSORSHIP

Chancellor's Office,
California Community Colleges

MANAGEMENT

San Jose Community College District
In cooperation with participating community colleges, business, industry and public representatives.

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JULY 1976

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INTRODUCTION I

The activity which is the subject of this report was supported in whole or in part by the U. S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U. S. Office of Education, and no official endorsement by the U. S. Office of Education should be inferred.

SAM EMPLOYER PROJECT

INTRODUCTION

"It is almost universally agreed that information about students after they leave college is important to a college in evaluating its programs and in planning for the future. It is also almost universally agreed that the task of obtaining "follow-up" information that is reliable, valid and useful is a difficult one." This statement introduced the August, 1974, report of the Improving Occupational Student Follow-up in California Community Colleges project. That project, popularly called SAM (Student Accountability Model), was an outgrowth of two concerns: (1) the Vocational Education Act requirement that colleges report annually the number of students who completed occupational programs and found employment in the field for which they were trained, and (2) the identification through COPES (Community College Occupational Programs Evaluation System) of "systematic follow-up of students who have completed occupational programs" as the lowest rated item of sixty used in evaluating community college occupational programs based on a stratified random sample of eight California community colleges reviewed in 1972-73.

In its first 1973-74, project year, SAM developed a model that could be implemented by community colleges and provide a consistent and systematic guideline for student follow-up. The Model consisted of two components. The first, the Accounting Component, classified occupational courses and identified and categorized occupational students by major. The second, the Follow-up Component, recommended procedures for obtaining information from students after they left the college. A variety of materials were developed to assist colleges with implementation of the SAM Model. During the 1974-75 project year, emphasis was placed on dissemination and training of local college personnel. Emphasis is being placed on field testing the Model and extending the system to non-occupational majors in the current project year.

Early in the development of the Model, it was determined by the SAM Consortium; Dr. William R. Morris, sponsor representative, Chancellor's Office, California Community Colleges; and Dr. Ben K. Gold, Project Coordinator; that designing procedures for obtaining employer feedback was a next essential step of follow-up. Consequently, an Employer Follow-up Project was proposed and funded for 1975-76. Although written as a separate project, the intent was that the eventual outcome would become an integral part of SAM. Hence, SAM Employer Follow-up was to be closely monitored by the SAM Consortium, as well as its own Consortium.

The Project focus was directed toward developing and testing a system for obtaining employer feedback information that could assist with occupational program review and evaluation. It was not anticipated or implied that hard data would be generated through the employer follow-up field tests. The complexity of the task was recognized by all persons involved with the project. Enthusiastic support for the concept and the importance of opening lines of communication between employers and occupational program educators was almost universal.

Sponsored by the Chancellor's Office, California Community Colleges, the project was based at the San Jose Community College District. Shirley B. McGillicuddy, Shirley McGillicuddy and Associates, Sierra Madre, California was retained as the Project Coordinator.

ACKNOWLEDGMENTS

Many individuals and four California community colleges provided valuable assistance and support for the project. Specific mention should be made of Dr. William R. Morris, Evaluation Specialist, Chancellor's Office, who served as sponsor representative and provided creative expertise and leadership. Also, Dr. Ben K. Gold, SAM Project Coordinator, who was an excellent resource, especially in providing guidance and direction to keep the project consistent with the aims of SAM. Others were San Jose Community College District's Board of Trustees and Chancellor Dr. Otto Roemmich; Dr. Paul P. Preising, District Director, Grants and Research, who served as management representative and provided leadership for the project design and conduct, as well as the SAM Employer Follow-up Consortium and SAM Consortium members who (Shown as Appendixes A and B) gave thoughtful attention and guidance to the project.

The four Community Colleges Districts who field tested Employer Follow-up were instrumental in identifying the project conclusions and recommendations for future implementation. Consequently, particular appreciation is extended to:

Foothill-De Anza District
Dr. Nathan H. Boortz
District Director for Technical Education
Mary Kecskemeti, Staff Assistant

San Jose City College
Dr. Lois Callahan
Former Dean of Occupational Education
Dr. G. S. Ohanneson
Assistant Dean of Occupational Education

San Diego District
William Steinberg
Assistant Chancellor
David Neel, Vocational Education Coordinator

Shasta College
Walter Brooks
Vice-President Student Affairs
Eve-Marie Arce
Field Test Coordinator

Gratitude should also be given to the thirteen sample community districts who provided open and candid comments that served as an information base for project design decisions, as well as all the many individuals at the six college campuses who participated.

OBJECTIVE III

OBJECTIVE

Develop by July 1, 1976, a system for collecting feedback information from employers of community college occupational education completers.

In addition to the objective, the project proposal specified that the employer follow-up system must be:

- Compatible with SAM (Student Accountability Model).
- Based on what community college educators need to know to assess, modify, and change programs and on what employers are willing to disclose.
- Guided by a Consortium of employers and community college educators.
- Monitored by the SAM Consortium.
- Flexible and simple for easy application to individual community college district needs.
- Tested and ready for implementation.

The objective and accompanying conditions became the basis for the project design. A Flow Chart, Schedule of Major Activities and Employer Follow-up Field Test summary are shown as Tables I, II and III.

TABLES IV

SAM

STUDENT
ACCOUNTABILITY
MODEL

SAM EMPLOYER FOLLOW-UP
REPORT
July 1976

Table I

Project SAM

EMPLOYER FOLLOW -UP FLOW CHART

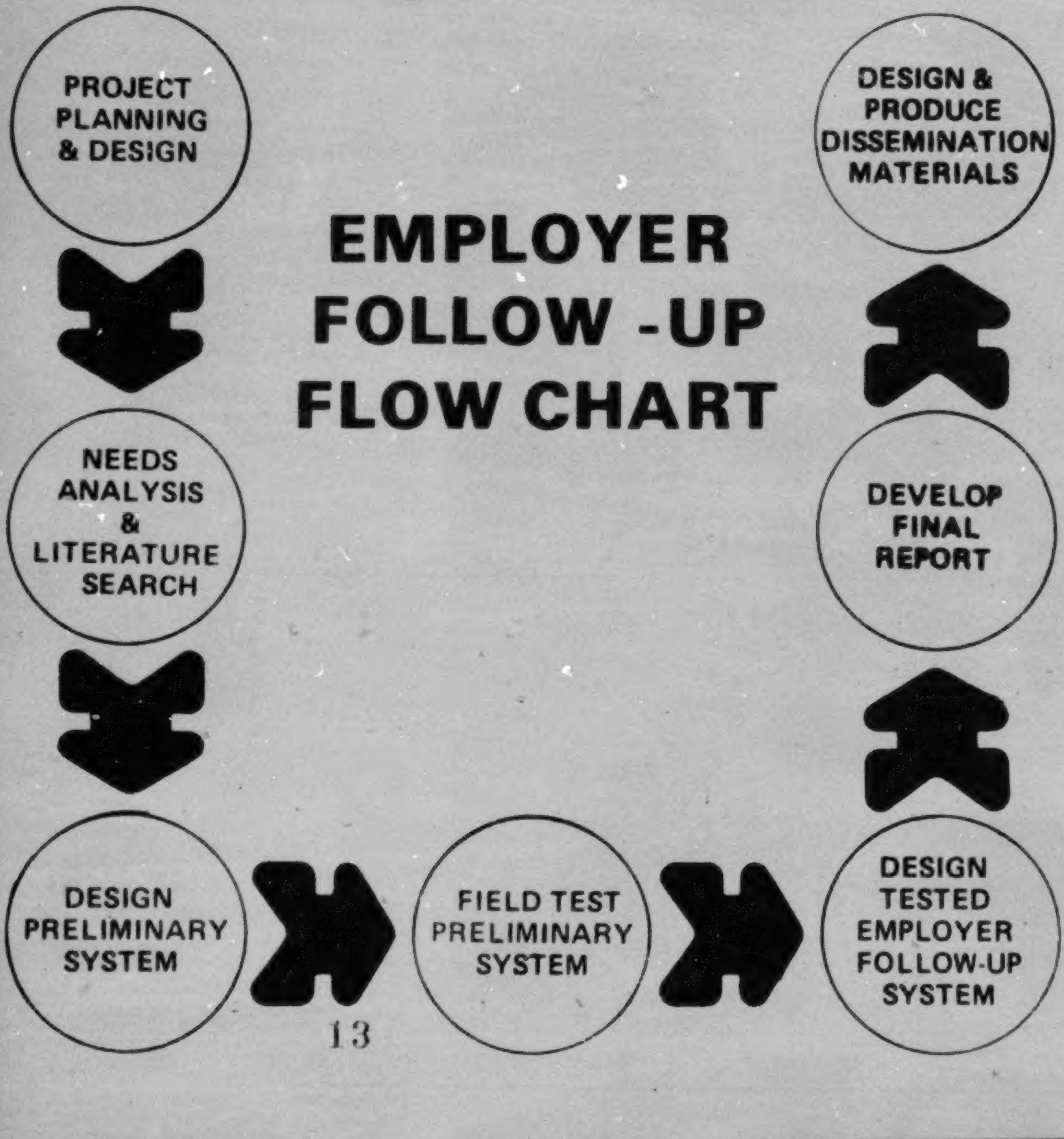
PROJECT PLANNING & DESIGN
NEEDS ANALYSIS & LITERATURE SEARCH
DESIGN PRELIMINARY SYSTEM
FIELD TEST PRELIMINARY SYSTEM
DESIGN TESTED EMPLOYER FOLLOW-UP SYSTEM
DEVELOP FINAL REPORT
DESIGN & PRODUCE DISSEMINATION MATERIALS

TABLE II

Project SAM Employer Follow-up

Schedule of Major Activities	October	November	December	January	February	March	April	May	June	July	*Prime Initiator
Project Planning Design	▬										PC
Development of Cost Control System	▬										SJ
Appointment of Consortium	▬	▬									CO
Literature Search & College Survey	▬	▬	▬								PC
First Consortium Meeting			▬								PC
Selection of Field Test Sites			▬	▬							CO
Development of Preliminary Model			▬	▬	▬						PC
Planning and Identification of Dissemination Approaches					▬	▬	▬	▬	▬	▬	PC
Second Consortium Meeting						▬					PC
Field Tests						▬	▬	▬			PC
Analysis of Field Test Data							▬	▬	▬		PC
Development of Tested Employer Follow-up Guidelines								▬	▬		PC
Development of Draft Final Report								▬	▬		PC
Third Consortium Meeting									▬		PC
Approval of Draft Final Report									▬	▬	CO/SJ
Production of Final Report and Delivery to Chancellor's Office										▬	PC
Completion of Cost Control Report										▬	SJ
Internal Project Evaluation			▬	▬	▬	▬	▬	▬	▬	▬	SJ/PC

*CO - Chancellor's Office
*SJ - San Jose Community College District
*PC - Project Coordinator

PROJECT OBJECTIVE: Develop and test a system for obtaining Employer feedback on community college occupational training programs.

SAM Employer Follow-up Field Tests
1976

TABLE III

SITE	OBJECTIVE(s)	PROGRAMS	EMPLOYER IDENTIFICATION	CONTACT METHOD
Foothill-De Anza District De Anza College Foothill College	. Obtain employer feedback on effectiveness of occupational education and training programs. . Incorporate information with ongoing program review and modification processes.	De Anza Auto Tech Photography, Physical Therapy Foothill Ornamental Horticulture Electronics	SAM Student Follow-up Respondents, additional student follow-up,faculty assistance.	Auto Tech (Pre-service) Electronics, Photography Mailed letter with questionnaire, preceded or followed by telephone call, telephone follow-through and telephone interview. Auto Tech (In-service) Mailed letter with questionnaire, preceded or followed by telephone call and telephone interview. Physical Therapy Mailed letter with questionnaire, telephone follow-through. Ornamental Horticulture Mailed letter with questionnaire, possible telephone alert, telephone follow-through.
San Diego District Mesa College Miramar College	. Establish an indication of overall instructional effectiveness in selected occupational programs by conducting an employer follow-up study of June, 1975 graduates. . Develop vehicle to facilitate articulation with employers to provide needed program/course revisions. . Provide an opportunity for instructional/follow-up personnel to interact directly with industry operational supervisory personnel.	Mesa Electronics Technology Miramar Aviation Maintenance Technology.	SAM Student Follow-up Degree or Certificate Respondents and additional student telephone contact to obtain inquiry permission.	Telephone and personal contact with employer (immediate supervisor). (Electronics, Placement Interviewed; Aviation Maintenance, Instructors Interviewed).
San Jose District - San Jose City College	. Collect employer data in sufficient depth to stimulate program improvement as indicated	Electronics	SAM Student Follow-up Respondents and additional follow-up by mail and telephone to assess preparation and to obtain inquiry permission.	Mailed letter with questionnaire; telephone follow-up to complete survey data with employer (direct supervisor).
Shasta-Tehama-Trinity Joint District Shasta College	. Develop an accurate description of target jobs. . Develop job markets for future program completers. . Modify existing educational program to better conform to current industry requirements.	Early Childhood Education (low completion) Computer Science/Key Punch Operation (Rapid Technology Change) Truck Driving (Newly initiated Certificate Program).	SAM Student Follow-up Respondents.	Mailed letter with preliminary questionnaire. Follow-up personal interview.

FINDINGS AND CONCLUSIONS V

FINDINGS AND CONCLUSIONS

At the outset, it was acknowledged that developing a system or model for Employer Follow-up would not be a simple task. Project experiences reinforced this premise and underscored the need for flexibility within the system to meet local college and specific occupational program needs and conditions.

The project did develop and test a system and some alternate options for obtaining feedback from employers of community college occupational education former students and responded to the conditions established for the system. The intent was to identify a method for obtaining employer feedback on the occupational preparation provided by the college that was flexible, relatively simple, and feasible for community colleges. That feedback, along with input from other contacts with employers, students, and college personnel was to be utilized in reviewing and evaluating occupational programs and in making management decisions. The process was refined to the extent that it can be used by a college to guide an employer follow-up study as an additional component of SAM and undergo further testing and refinement.

Project activities isolated some obstacles or problem areas that need to be addressed in employer follow-up. Activities also led to some possible conclusions about employer follow-up. These two areas are treated in this section of the report. Specific situations encountered in each field test that were the basis for consensus conclusions are detailed in the individual reports of the four tests and are shown as Appendixes C through F. (Appendix C, Foothill-De Anza District; Appendix D, San Diego District; Appendix E, San Jose City College; and Appendix F, Shasta College).

Problems Identified

Compatibility with SAM (Student Accountability Model) was a major consideration in the development of the Employer Follow-up system. Identification of employers through SAM Student Follow-up surveys was a practical "integrated systems" approach. However, the approach relied on the number of students responding and the information provided. Consequently, employer follow-up was affected by progress and results achieved through SAM at the four test sites and the two systems shared some common problems. It is important to know and emphasize that 1975-76 was a pilot test year for the SAM system.

Percent of students responding to follow-up needs to be improved to develop a significant number of employers from which to gain feedback. None of the test sites had prepared students for the follow-up surveys, the importance of their participation, and the use of the information before the students left the campus in the spring of 1975. In the employer follow-up field tests, instructor input and additional student follow-up contacts were utilized to increase the employer contact lists. As colleges develop student understanding of and orientation to follow-up response levels should increase. Foothill-De Anza District, for example, has set a goal of 75-80% student response for 1976. All four test sites plan to prepare students for follow-up before they leave the campus.

Student mobility, both geographical location and job change, was a significant factor in tracking students and, consequently, employers (see San Jose and Foothill-De Anza reports). Mail, telephone, and "house call" efforts to locate students were time consuming and not particularly successful. Evening or weekend telephone contacts were necessary to reach employed former students. Job mobility was further complicated by the seasonal aspects of employment in some occupations, e.g., ornamental horticulture, photography.

The student follow-up questionnaire needs to be designed to facilitate employer follow-up. This would include collecting such information as: employer name and address, the immediate supervisor of the former student, and the job title for the position held by the former student.

Student follow-up computer print-outs need to be organized by program rather than an alphabetical listing (see Foothill-De Anza report) to simplify employer follow-up. Names of individual program completers had to be manually pulled from the computer print-out lists which introduced an additional time-consuming step.

Obtaining student permission to contact the employer was a major obstacle to employer follow-up. This step was advised by the Employer Follow-up Consortium and community colleges. It was included in three of the test sites and involved extensive effort to contact the former student by mail or telephone to gain pemission to contact the employee. When permission was not given, it reduced the number of employers who could be surveyed. No employer contacted in any of the four sites asked the college surveyer if the former student had authorized the inquiry. One test site did not request student permission to contact the employer and experienced no problems. Since the intent of the feedback is program rather than personal performance oriented, it is questionable if the privacy right is an issue. Future employer follow-up should consider eliminating the requirement for student permission to contact the employer.

Small programs or programs with low enrollment provide a limited sample of both students and employers. To achieve significant information about program quality and relevance, it may be desirable for some occupational programs to conduct follow-up surveys over a two-year period with more than one class (See San Diego report).

Conclusions

Employer follow-up in some form was viewed positively by community colleges. All of the districts/colleges sampled in a survey to provide an information base for the project (see Appendixes G and H) and all four districts participating in the field test favored some form of employer follow-up to provide input to program.

Employers sampled responded favorably to the request to provide input to college occupational education programs. The positive aspects of employer response were one of the consistently outstanding experiences of the field tests.

Many employers sampled did not have first-hand knowledge of what a community college occupational training program encompassed and, therefore, could not react to training without identifying the program through tieing it to the knowledge and skills that a specific employee(s) brought to the job.

Employer follow-up should be utilized as a "formalized" supplement to other types of employer contact and involvement, e.g., needs assessment, advisory committees, technical seminars, field trips. Employer follow-up surveys may expand and enrich these other forms of interaction. Employer follow-up may further assist a college in evaluating other activities, e.g., in two of the field tests, it was indicated that advisory committee composition might be reviewed especially in relation to the practice of including only representatives of middle and upper management. Employer follow-up contacts were made with the former student's immediate supervisor - often a line employee, which appeared to provide a different reference for input.

Clearly defined institutional objectives and priorities should guide employer follow-up. Three of the four test sites identified objectives they wished to accomplish (see Table III) in addition to the project objective. The objectives influenced the program selection, contact method, instrument design, personnel involved, and dissemination plans.

Program selection should be based on established priorities or criteria. Consideration might be given to programs that: have experienced rapid technology change, are new, have marginal enrollments, have been identified by the advisory committee or staff as in need of revision, have low placements, and have shown evidence of needing expanded interaction between program staff and employers. Program selection priorities become particularly essential in view of the apparent impracticality of conducting employer follow-up surveys annually for all programs.

Participation and involvement of program staff is highly desirable if program change is to be an outcome. Early involvement of program personnel in determining objectives and designing an instrument tailored to the specific occupation was an added strength as was evidenced by two of the four field tests (see Foothill-De Anza and San Diego reports).

Consideration could also be given to involving program staff in employer follow-up contacts (see San Diego report). Time available and the possible introduction of bias should be a consideration in involving staff in this phase of employer follow-up. Program staff involvement in the use and analysis of information generated through employer follow-up is essential.

Some form of personal contact with employers, i.e., telephone or personal interview, was favored by all four test sites. Telephone contacts (see Foothill-De Anza and San Jose reports) were felt to be the most cost effective methods by two of the sites. Personal interviews as the contact method selected by two of the sites (see San Diego and Shasta reports) supported specific objectives identified for the employer follow-up tests.

Qualifications and training for interviewers should be an integral part of the planned approach to employer follow-up. In the four test sites, a variety of persons were utilized to contact employers including instructors, placement staff, classified employees, and outside consultants. Persons selected for employer contacts, as was previously indicated, will be influenced by the objectives for the survey. Consistency through training personnel in interview techniques was believed to be essential.

Employer follow-up may result in additional benefits to the college and the program. These should be considered in analyzing the cost effectiveness of the system. Included would be such advantages as expanded dialogue with employers, identification of resources, assessment of future work experience stations and placement opportunities, and improved employer relations.

An employer follow-up procedures manual should be developed to assist local colleges with implementing a system that builds on the experiences gained through the project. The manual would suggest steps involved in planning and implementing employer follow-up, include sample questionnaires, and identify some of the problems that may be encountered and possible solutions. If employer follow-up is to become a component of SAM, the manual should be an integral part of the SAM materials and possibly could be included in the SAM Manual which is scheduled for revision in the fall of 1976.

Project experiences also led to some tentative conclusions about employer follow-up. These might appropriately be given consideration in future experimentation and refinement of employer follow-up systems.

College programs and departments who share a common interest in employers may provide a vehicle for employer contact and might be more integrally involved in the system. Included would be such entities as work experience, placement, counseling staff. Cross-level involvement was touched on in the field tests, and would appear to offer advantages and avenues for implementation that were not explored fully.

Additional means of obtaining expanded employer involvement in the follow-up process such as industry or trade association support, utilizing the personnel department of large organizations to distribute and collect information, might be explored. In some instances (see Foothill-De Anza report) reaching the line supervisor in a large company was difficult.

Continued attention needs to be directed toward identifying a simplified, direct, and efficient system for gaining employer feedback. Flexibility and adaptability to varying local conditions and needs such as type of occupation, employer availability, and geographic location of the college and employers are essential ingredients of the system.

Timing for employer follow-up tests was governed by timing of SAM student returns and advisement from the Employer Follow-up Consortium. It was felt that approximately six months after employment was appropriate because; 1) employer probationary periods are generally six months; and 2) it would still be possible to separate skills brought to the job from those learned on the job. However, there were some indications that this time sequence does not provide adequate opportunity for a former student to utilize more advanced training gained through college programs. It may be advisable to explore follow-up after a longer period of employment or two stage follow-up to sample entry level as well as more advanced employment proficiencies.

Correlation between employer and student perceptions was explored on a limited basis in the San Jose City College tests. Expanded efforts to compare perceptions of students, employers, and college personnel should provide a more complete picture of occupational training provided through college programs.

Initial employer follow-up surveys may best be used to provide "indicators" of programs that are in need of more indepth study before major program modification and change would take place. An indepth follow-up study might utilize a task analysis approach (see San Jose report) that links specific skills with occupational courses and correlates student and employer perceptions.

MAJOR STEPS IN PROJECT DESIGN AND CONDUCT VI

MAJOR STEPS IN PROJECT DESIGN AND CONDUCT

Although many of the major activities of the project overlapped and were going on simultaneously, each step for clarity of description in the written report is discussed in the sequence identified in the schedule.

Project Planning and Design Since the project was housed at the San Jose Community College District, the SAM Project was based at Los Angeles Community College, and the Project Coordinator was located in Sierra Madre, California, it was important to clarify early the working and reporting relationships that would be maintained. In August, the project management representative, Dr. Paul P. Preising; SAM Project Coordinator, Dr. Ben K. Gold; the sponsor representative for both SAM projects, Dr. William R. Morris; and the Employer Follow-up Project Coordinator, Shirley B. McGillicuddy, met to chart the course of events and to establish clear understanding of the objective, the anticipated results, the constraints, and the fiscal management and controls that would be applied.

Subsequently, the Project Coordinator developed the more detailed plan for the project approach, the budget, and the schedule for modification and/or approval.

Search for Employer Follow-up Studies and Experiences Dr. Benn K. Gold had done extensive research on follow-up studies that had been conducted by educational institutions in California and in other states as an information base for SAM. He was an excellent source of follow-up information. Pertinent studies available from Dr.

Gold and listed with ERIC (Educational Resource Information Center) were reviewed as a basis for developing a system for employer follow-up. A Bibliography of literature reviewed is shown as Appendix J.

What Colleges Need To Learn From Employers In order to answer the question, "What do community colleges need to learn from employers of former students?", a survey of California community colleges was undertaken. Rather than a mail survey of all colleges, it was felt that more valuable information would be gained through a personal visit and interview. A representative sample of colleges was selected by the sponsor representative and the SAM Project Coordinator. Colleges were divided into eight cells according to occupational education ADA and geographic location.

A data gathering instrument was developed to guide the interviews and insure consistency in information collected. Dr. Nathan H. Boortz assisted with the college survey, contacting all of the northern colleges. The thirteen districts (representing seventeen community colleges) interviewed are shown as Appendix G. The objectives for the interviews were to collect (1) information about district/college experiences with employer follow-up; and (2) input the district/college needed from employers to review and evaluate programs. Interest and willingness to participate in an employer follow-up field test was also determined. Colleges were cooperative and receptive and provided valuable observations and suggestions for the project. An abstract of information gained through the interviews with sample colleges is shown as Appendix H.

Employer Follow-up Consortium The project proposal specified that a Consortium guide and evaluate the project. Leaders from community colleges and employers of community college occupational students were invited by the Chancellor's Office, California Community Colleges, to serve as Consortium members. Five college and nine employer representatives accepted the invitation. Because of extensive commitments and busy schedules, it was not possible for all individuals to participate. Persons who were involved in the Consortium activity are shown as Appendix A.

The Consortium was a good resource for the project and meetings provided an excellent platform for interaction between educators and employers. Four meetings were planned to obtain Consortium advisement at major points in the project progress. Subsequent adjustments in the project schedule caused the Consortium to recommend consolidation of the third and fourth proposed meetings. Dates and major focus for each meeting were as follows:

December 16, 1975	React to needs assessment (college survey and literature search) information in relation to employer response to information requested. Advise on design of preliminary model.
March 2, 1976	Review preliminary model and field test plans and procedures.
June 3, 1976	Review field test experiences and findings and advise on employer follow-up recommendations.

SAM Consortium

The SAM Consortium was charged with the responsibility for monitoring the project. It was utilized as a valuable resource to advise on the development of an employer follow-up system and to maintain compatibility between employer follow-up and the SAM Model. SAM Consortium members are shown as Appendix B.

The Project Coordinator attended SAM Consortium meetings to report progress and gain input. This approach provided additional valuable advisement and helped to identify refinements that would need to be stressed in the SAM Model to provide an information base for employer follow-up, for example, student identification of employment supervisor, address, and telephone. The student follow-up pilot tests (in process during the 1975-76 year) had not necessarily been designed to accommodate the added component of employer follow-up.

The SAM Consortium was supportive of the employer follow-up component and provided an added dimension of expertise to advise on and monitor the project.

Development of Preliminary Model Utilizing information collected through the literature search, the sample California community college survey of employer feedback methods and input needed from employers, and the advisement of the Employer Follow-up Consortium and the SAM Consortium a preliminary plan for the employer follow-up field test procedures and a suggested instrument were developed.

Emphasis was placed on the objective of gaining program feedback and not personal performance evaluation. A keen concern of community college educators and employers was employer resistance that might be met because of privacy rights. This element was introduced because of the anticipated need to assist employers by providing names of former students trained so they might more specifically identify preparation provided by college programs. To counter this anticipated objection, it was suggested that consideration be given to obtaining permission from a former student for employer contact.

Field test procedures identified the planning steps the college needed to take: objective(s), method, personnel assigned, time schedule, budget, requirement for outside assistance, description of data analysis and control, and dissemination plans. A copy of the field test procedures is shown as Appendix I.

The preliminary instrument was general and not oriented to specific programs. However, it established some categories of information to be obtained from employers as well as a suggested format. The instrument was used as a guide by the field test sites in developing questionnaires for specific programs.

Suggested employer probes dealt with technical skills, pre-employment skills, interpersonal skills, importance of college training to the hiring decision, whether a former student would be hired for a future job opening, and an identification of program strengths and needs for improvement. Both rated and open-ended questions were suggested.

Field Tests Criteria were developed for site selection for field tests. Priority consideration was given to the district/college progress in implementing the SAM Follow-up component and identifying employers of former students. Additionally, the district's willingness to participate in the field test and the availability of personnel to coordinate the test were important. It was also believed to be of value to select test sites that had determined some specific local objectives for conducting employer follow-up and that would offer some variation in experiences, e.g., urban or rural setting, program selection.

Four districts were selected for field test participation. All four districts had completed application of the SAM Follow-up component with non-continuing students from spring, 1975. The districts included: Foothill-De Anza, San Diego, San Jose, and Shasta-Tehama-Trinity Joint District.

Each district submitted a preliminary plan for approval. Limited financial assistance was made available through the project to assist with the field tests. Although individuality and autonomy were encouraged in each test, since the intent was to develop a system for employer follow-up, it was important also to maintain some uniformity and control. Field Test Coordinators met with the Project Coordinator, the sponsor representative, and the Employer Follow-up Consortium to resolve problem areas and identified concerns before the tests were conducted.

In the four participating districts, six colleges and nine different programs were represented. Three of the four districts identified additional local objectives for conducting employer follow-up. Each test selected a contact method(s) that best supported project and college objectives and the program for which follow-up information was being obtained and could be implemented within existing constraints. It is important to emphasize that project time limitations for the tests imposed difficult restrictions for the districts. They were additionally affected by response levels from the student follow-up. The test sites, objectives, programs included, and the contact method used are shown as Tabel III on page 8 of this report.

The Project Coordinator maintained contact with the sites during the field tests and visited each site to discuss findings and recommendations. Field Test Coordinators met as a group to enter into consensus discussion for future employer follow-up recommendations, and suggestions for planned dissemination.

It seems necessary to point out that the data obtained through the follow-up system was not significant enough to make major program changes. However, the colleges were particularly sensitive to the data and this discrimination may lead to some future modification.

Dissemination Project dissemination plans include the final report furnished in limited quantity to the Chancellor's Office, California Community Colleges, and an abstract for distribution to community college and employer audiences. A fact sheet built around frequently asked questions was developed during the project year for use with employers and educators. Employer Follow-up was included as a panel discussion in two SAM Workshops for California Community Colleges in June, 1976. Since the project is a component of SAM and plans for continuation are to integrate the system into that Model, additional dissemination is planned in conjunction with Project SAM. This includes a sound/slide presentation and an insert in the SAM Procedures Manual scheduled for revision in the Fall of 1976.

Evaluation Continuous project evaluation was accomplished by the Employer Follow-up Consortium and the SAM Consortium. Additionally, the sponsor representative, Dr. William R. Morris; the management agency representative, Dr. Paul P. Preising; the Project SAM Coordinator, Dr. Ben K. Gold; and the Employer Follow-up Project Coordinator assumed ongoing responsibility for project evaluation.

APPENDIXES VII

Appendix A

PROJECT SAM
EMPLOYER FOLLOW-UP

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Mr. Thomas Rose
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Mr. Herbert Schlackman
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EMPLOYER COMPONENT

of the

STUDENT ACCOUNTABILITY MODEL (SAM)

A Field Test Report

Office of Technical Education

Foothill-De Anza Community College District

De Anza College

Foothill College

Los Altos Hills, California
May 1976

ACKNOWLEDGEMENTS

The kind of occupational program evaluation procedures attempted in this study is the first of its kind to be undertaken in the Foothill-De Anza Community College District. The District Office of Technical Education is indebted to a number of persons for their assistance in designing and implementing a "SAM-Employer Field Test Plan." The experiences gained in the implementation of that plan serves as the basis for this report.

Although not an inclusive list, special recognition should be given to the following for their assistance in providing student and employer information, questionnaire design and data collection:

De Anza College

Auto Tech
Les Schwoob, Walt Marek
Roy Potter

Photography
George Craven, Shirley Fisher

Physical Therapy Assisting
Fran Lupi, Stevie White

Richard Kent,
Associate Dean of Instruction

Foothill College

Ornamental Horticulture
Bill Patterson,
Charles Koningsberg

Electronics
Paul Evans, Bill Long

Harold Seger,
Dean of Instruction

Gail Skaggs, Data Specialist, District Office of Technical Education

SAM Employer Field Test Report

INTRODUCTION

The Student Accountability Model (SAM), Employer component, is being developed and field tested in four community college districts in California. This is a report of that field test as conducted in the Foothill-De Anza Community College District. The Project was funded through the California Community College Chancellor's Office with VEA, Part C monies and was managed by the San Jose City College District. Shirley McGillicuddy, of Shirley McGillicuddy Associates, was the consultant to the Project.

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METHODS

Five discrete occupational programs were selected as the focus for this SAM field test project. As stated in the Field Test Plan, "diversity rather than homogeneity" was the criterion for selecting the five programs for the pilot test. The programs were Electronics and Ornamental Horticulture at Foothill College and Automotive Technology, Photography and Physical Therapy Assisting at De Anza College. The Plan further stated that a value judgement made was that a "single contact method is neither ideal nor appropriate for all programs." Proposed, and subsequently carried out, was a "theme and variation" or eclectic approach tailored to meet time and financial constraints and to accommodate certain unique characteristics of each program and occupation as perceived by the program faculty members.

Procedures actually followed for each program are displayed in Table I which indicates the original contact method plan, and to which a column was added to show the methods actually used.

As seen in Table I, four different methods were used in contacting employers: (1) a questionnaire mailed with a cover letter requesting response and return (see Exhibits "B," "D-1" and "D-2"), (2) a phone call stating the purpose of the survey and soliciting employer cooperation in responding to a questionnaire which, with their concurrence, would be mailed (see Exhibits A-2, C-2, E-2 and F-2), (3) a questionnaire mailed with a cover letter stating that a phone interview would follow (see Exhibits A-1 & 2, C-1 & 2, E-1 & 2 and F-1 & 2) and (4) a telephone interview only. The cover letter attached to each questionnaire was signed by a department head or lead instructor. Although planned as a last resort if all other methods failed, the personal interview method was not used. Planned follow-up measures for non-responding employers included a second questionnaire and phone call. Since time was a critical factor in the pilot study only phone follow-ups were actually used.

The original plan contemplated use of the postal service for sending all questionnaires. In the interest of time, continuing education students who were completing an Auto Technology Clinic hand carried questionnaires to their supervisors for completion and return to the college.

TABLE I

Planned vs. Executed Modes of Follow-up

Methods	Programs	Planned	Executed
1. Mail program-tailored questionnaire with cover letter.	Auto Tech		
	Pre-service	1,4 (5)	2 or 3,4,6
	In-service*	--	2 or 3,6
2. Phone call followed by mailed program-tailored questionnaire with cover letter.	Electronics	2,4	2 or 3,4,6
3. Mail program-tailored questionnaire followed by phone call.	Photography	2,4	2 or 3,4,6
4. Phone call follow through on 1,2, and 3 above.	Physical Therapy	1,4	1,4
5. Personal Interview (if required)	Ornamental Horticulture	1,4 (5)	1 or 3,4
6. Telephone Interview only.*			

*Not in original plan.

FINDINGS AND RESULTS

"Findings" are preceded by identifying problems encountered. The problems are enumerated below.

1. The negative effects of the recession were compounded in one occupation (Photography) where some kinds of jobs were found to be seasonal in nature. For all programs, inadequate response to the SAM student questionnaire and separation from the job prior to his/her employer's receiving the questionnaire resulted in a lack of authorization for employer contact and, according to SAM Guidelines, a block to the process. Although a concerted effort was made initially to locate the student, explain the need for permission to contact his/her former employer, mail and receive the signed consent statement, contact the former employer, provide him/her with this evidence and secure a response, it was judged to be too cumbersome and time consuming to pursue and the procedure was dropped.

2. In phone follow-ups a supervisor frequently stated that s/he did not receive a questionnaire. When this occurred, an immediate attempt was made to obtain responses via the telephone. Results in these instances were tabulated in the "Interview, Phone Only" category of Table I.

3. Employer identification was the most formidable obstacle. Second mailings to students of the same questionnaire sent them in November, 1975 were made and phone numbers of program completors were obtained from the two Registrar's Offices. Phone calls were made to those students during both day and evening hours. The number of former students thus contacted was still fewer than satisfactory because (a) much transiency has occurred on the part of former students and there is little or no knowledge of current whereabouts, (b) frequent responses indicated that individuals were neither seeking nor available for work, (c) in some instances, where a former student was not working, s/he declined to identify or have the employer contacted and (d) "SAM identified" completors for the five programs studied had to be extracted manually from the computer print-outs.

Survey results or findings, were tabulated by program and summaries are given in Tables II and III A-1 through III-E. Summaries relating to job skills had a "useful" heading inserted between the columns "Essential" and "Non-essential": This was considered necessary in order to accommodate respondents who indicated a response somewhere between the two extremes.

TABLE II

DATA GATHERING SUMMARY

PROGRAMS	No. of Students contacted	No. of employers identified	No. of employers that gave ok	Employer Contacts					Employer Follow-up				No. of completed employer questionnaire	% Returns (#13 #2)
				Advance phone call	Questionnaire	Interview, Phone Call	Interview, Personal	Total, Unduplicated contacts	Second ques.	Phone call #1	Phone call #2	Phone call #3		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Auto-Tech														
Pre-service	66	26	26	20	13	13	0	13	0	11	7	0	16	61%
In-service*	163	31	31	0	31	0	0	31	0	0	0	0	31	100%
2. Electronics	174	15	14	13	15	9	0	9	0	8	0	0	9	56%
3. Ornamental Horticulture	77	16	16	16	16	9	0	16	2	16	13	13	9	60%
4. Photography	167	33	17	33	18	10	0	13	1	20	20	0	12	36%
5. Physical Therapist Assistant	38	11	10	2	11	0	0	8	0	5	0	0	8	72%
Total #	685	132	114	84	104	41	___	90	3	60	40	13	85	

AUTOMOTIVE TECHNOLOGY
TABULATION OF DATA

The jobs to which this tabulation of data applies range from a mechanic to service station attendant.

JOB SKILLS	Essential	Useful	Non-essential	Excellent	Good	Acceptable	Below Expectations	Poor	Not applicable
a. Technical Knowledge	10	1		9	4				3
b. Operation of Equipment	10	1		7	5				4
c. Writing Skills	11		4	4	6	1			5
d. Verbal Communications	14	1		6	5				5
e. Computational Skills	7		3	5	4				7
f. Pre-employment procedures	6		2	5	4				7
g. Orienting individuals to employment	9	1		6	4				6
h. Others (Sales and Job responsibility)	1						1		4
Practical application	2								
Total % =	85%	4%	11%	36%	27%	1%	1%		35%

Automotive Technology - Pre-service

Table III-AI

2. How important is formal Automotive Training in relation to other qualifications you consider in making the hiring decision?

10 Very important   3 Moderately important

___ Of little importance   2 Unimportant

3. Would you hire another De Anza Automotive Technology graduate for a future job in your organization?

12 Yes   ___ No   2 Maybe

OPEN-END QUESTIONS

What, in your opinion, is the major strength of the Automotive Technology training provided by De Anza College?

A. Our program teaches students to be professional and confident.

B. Equipment/techniques are up-to-date

C. The Automotive Technology Program instructors at De Anza College place great emphasis on the basic skills involved in this field.

D. The students are trained to check all areas/possibilities of problems before starting work.

What, in your opinion, is the greatest need for improvement?

A. Students need more experience on the job. Possibly through a Work Experience Program.

B. Cleaner and neater work -- Flexibility in theory. (What is learned is not always a solution to field problems) Several opinions or ideas may prove more effective.

What additional comments or suggestions do you have for De Anza's Automotive Technology program?

A. The extra knowledge of duties such as those of a service station attendant, are helpful.

B. Lack of communication between student and customer. Suggested more emphasis on speech and advertising classes.

C. Students should be aware of the "business" aspect of the company.

D. Better penmanship. Managers/supervisors have a hard time reading what they write on the work orders.

Table III-A2

Automotive Technology - In-service

	Very Definitely	Somewhat	Very Little	Don't Know
1. Do the clinics improve the confidence level of the mechanic?	28	3		
2. Do the clinics improve a mechanic's ability to analyze problems?	27	2	2	
3. Do the clinics improve a mechanic's ability to take proper steps for correcting a problem?	26	4		
4. Do the clinics broaden a mechanic's abilities?	30	1		
Total %	90%	8%	2%	

OPEN-END QUESTIONS

What, in your opinion, is the greatest need for improvement in the Automotive Technology training program provided by De Anza College?

1. Up-to-date data/equipment
2. Instructors very thorough in teaching the basics
3. Students' training is applicable
4. Majority of graduates very confident

What, in your opinion, is the greatest need for improvement in the Automotive Technology training program provided by De Anza College?

1. Very few advanced classes

2. Need bigger variety of materials from different manufacturing companies (i.e., carburators, fuel engine systems, electronics fuel injection)

3. Possibly add more labs to the program (to help students apply knowledge)

Electronics

Table III-B

11

ELECTRONICS PROGRAM

TABULATION OF DATA

Job title: Lab technician

JOB SKILLS	Essential	Useful	Non-essential	Excellent	Good	Acceptable	Below Expectations	Poor	Not applicable
a. Technical knowledge of electronics theory	5				1				9
b. Operation of equipment & instruments	7					1			9
c. Writing skills	2	4	3			1			9
d. Verbal communications	5	2	2			1			9
e. Computational skills	1		3		1				9
f. Pre-employment procedures	3	2	4			1			9
g. Orienting individuals to employment	7		2			1			9
h. Others ( )									
Total % =	58%	15%	21%	___	2%	5%	___	___	91%

2. How important is college level electronics training in relation to other qualifications you consider in making the hiring decision?

   6 Very important   2 Moderately important   ___ Of little importance

   ___ Unimportant

3. Would you hire another Foothill graduate for a future job in your organization?

   6 Yes   1 No

OPEN-END QUESTIONS

What, in your opinion, is the major strength of the occupational training provided by Foothill College?*

1. Majority of employers felt Foothill has a worthwhile program--students get thorough knowledge of basics.
2. Graduates seem to have confidence in their work.
3. One employer commented that there were few good sources of electronics training in the area, and that Foothill offered a broad range of information

*Many employers could not answer this question because they were not familiar with our Electronics program.

What, in your opinion, is the greatest need for improvement in the occupational training provided by Foothill College?

1. More emphasis on:
   a) computor architecture
   b) micro-processors
2. There is a need to improve/update the equipment, books, and teaching methods.
3. Emphasize use of test equipment, (i.e., more lab work & courses in micro-wave).
4. Areas mentioned that need improvement:
   a) T-square logic
   b) update the state of the Art
   c) be more thorough in teaching the students about integrated circuits

2. Several employers expressed interest in talking with instructors about the curriculum.

3. Additional evening courses.

Some employers felt they did not know enough about our training program and/or the student's knowledge prior to employment and did not answer the above Open-End Questions.

There was a general agreement that the applicants with college level electronics made little or no differences in the hiring decision. This is because all new employees start at an apprentice level.

ORNAMENTAL HORTICULTURE PROGRAM

TABULATION OF DATA

Job(s) titles: Assistant gardners/nurserymen.

JOB SKILLS	Essential	Useful	Non-essential	Excellent	Good	Acceptable	Below Expectations	Poor	Not applicable
a. Operation of Equipment	2	1	3		4				5
b. Writing Skills	3		4		3	1			5
c. Verbal Communication	6		1	2	3				4
d. Computation Skills	1	1	2		5				6
e. Knowledge of Plant Materials	5		1	2	2				5
f. Knowledge of Construction	4		2	1	3				5
g. Knowledge of Design	7			2	3				4
h. Knowledge of Irrigation Systems	4		2		3	1			5
i. Other ( )									
j.									
Total % =	65%	4%	31%	10%	33%	3%			54%

Table III-C

1. How would you rate the effectiveness of Foothill's programs in preparing individuals for pre-employment procedures? (i.e., interview, application, appearance).

   3 Excellent 2 Good ___ Acceptable ___ Below Expectations

   ___ Poor ___ Not applicable

2. How would you rate the effectiveness of Foothill's programs in orienting individuals to employment? (i.e., work attitude, attendance, cooperation with co-workers & management).

   4 Excellent 1 Good ___ Acceptable ___ Below Expectations

   ___ Poor ___ Not applicable

3. How important is Foothill's Ornamental Horticulture training in relation to other qualifications you consider in making the hiring decision?

   4 Very important 1 Moderately important 1 Of little importance

   ___ Unimportant

4. Would you hire another of Foothill's graduates for a future job in your organization?

   5 Yes ___ No 1 Maybe

OPEN-END QUESTIONS

What, in your opinion, is the major strength of the Ornamental Horticulture training provided by Foothill College?

1. Students have a broad knowledge of the field and are very confident when they graduate.
2. Employers noted that the students also had some business background, and were very attentive and followed directions well.
3. Over-all knowledge of equipment very good.

What, in your opinion, is the greatest need for improvement in the Ornamental Horticulture training provided by Foothill College?

1. There is no specialized training; students only employable as nurserymen.
2. Materials need to be updated (i.e., chemicals and how to apply them).
3. Because of problem #1, the employers feel they have to spend too much time training students.

4. The majority of students are looking for higher than entry-level positions, but do not have sufficient training.

5. Stronger emphasis on marketing/advertising.

What additional comments or suggestions do you have for Foothill College's Ornamental Horticulture training programs?

1. Add a "safety course" to the landscape maintenance program. (i.e., operating equipment, use of pesticides).

2. Majority of employers feel students cannot get sufficient training/experience in just two years.

DE ANZA COLLEGE'S
PHOTOGRAPHY PROGRAM
TABULATION OF DATA

Photography

The jobs to which this tabulation of data applies ranges from sales/photographers to dark room assistant.

JOB SKILLS	Essential	Useful	Non-essential	Excellent	Good	Acceptable	Below Expectations	Poor	Not applicable
a. General operation of equipment	4	1	1		3	1	2		5
b. Skill in visualizing images/pictures	3	1	2		4		2		5
c. Gen. knowledge of black & white processes	5		2		4		1		6
d. Gen. knowledge of color processes	6			1	3		2		5
e. Verbal Communications	4		2		4		4		5
f. Problem solving ability	5		2		3	1	2		5
g. Knowledge of cinema production skills	1	1	4		2		2		7
h. Knowledge of cinema laboratory tecnniques	1	1	5	1	2		2		7
i. Other (Applied Industrial/Commercial)	2						1	I	1
Business management More knowledge of Litho	1 1								
Total % =	59%	8%	33%	2%	27%	2%	18%	1%	5%

Table III-D

2. How would you rate the effectiveness of our program in prepraing individuals for pre-employment procedures? (i.e., interview, application, personal preparation).

   ___ Excellent   2 Good   ___ Acceptable   1 Below Expectations

   ___ Poor   ___ Not applicable

3. How important is De Anza's photography training in relation to other qualifications you consider in making the hiring decision?

   2 Very important   3 Moderately important   1 Of little importance

   1 Unimportant

4. Would you hire one of De Anza's graduates for a future job in your organization?

   4 Yes   2 No   3 Maybe

OPEN-END QUESTIONS

What, in your opinion, is the major strength of the Photography program provided by De Anza College?

1. Over-all training is very good.
2. The program is successful as far as quantity and interest of students.
3. Thorough in teaching the basic technique of printing; the color lab is very good.

What, in your opinion, is the greatest need for improvement in the Photography program provided by De Anza College?

1. Students work too slowly in the dark room and do not turn out good prints within a short time period.
2. Students should know the day-to-day routine of photographers in various fields.
3. "Today we're in the canned-era" -- very few young photographers have actually prepared tools from scratch, and have difficulties correcting problems that arise while printing.

4. There is a need for better equipment. (i.e. in the dark room) With updated equipment, the students would be more employable. It was mentioned that our training was geared for employment only for portrait studio positions. Creativity is not as important as competence in the technology world.

Need to emphasize more on:

a) industry theory of the film processing

b) optical system in camera

c) working with negatives and different sizes/kinds of film

d) students need more knowledge of business and advertising --possibly business administration, marketing, accounting.

What additional comments or suggestions do you have for De Anza College's Photography program?

1. More off-campus work in the technical field.
2. Several employers suggested meeting with the instructors of the program to plan seminars or field trips to let students become familiar with the day-to-day routine

Job Title: Physical Therapy Assistant

1. 25%General hospital
2. 8%Rehab. Facility
3. 17%Private practice
4. 25%ECF
5. 17%Out-patient clinic
6. ___ Pediatric facility
7. 8% Other Orthopedic & CVA care

PTA RECEIVES FORMAL EVALUATION EVERY:

1. ___ 3 months
2. 42%6 months
3. 28% annually
4. 15%never
5. 15%Other ____________

PTA EVALUATION GIVEN BY:

1. 70%Chief RPT
2. 10%Senior RPT
3. 10%Staff RPT
4. 10%Other ____________

NATURE OF SUPERVISION:

	DAILY	WEEKLY
On premise	78%	11%
Phone	--	--
Written	11%	--

	Excellent	Good	Acceptable	Below Expectations	Poor
How would you rate the overall effectiveness of the technical training provided by De Anza College?	6	2			
How would you rate the effectiveness of De Anza's programs in orienting individuals to employment?	3	4	1		
How would you rate the effectiveness of De Anza's programs in preparing individuals for pre-employment procedures?	1	6	1		
Overall totals	10	12	2	___	___

% of Excellent & Good= 92%

Physical Therapy

Table III-E

DE ANZA COLLEGE
PHYSICAL THERAPIST ASSISTANT PROGRAM

TABULATION OF DATA

JOB DUTIES OF PTA	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%
Patient care					1			7		
Preparation & clean up	2	3	1	1						
Clerical	4		2							
Conferences/ meetings	4		1							
In-service	5									
Student affiliation programs (RPT/PTA)	2	1								
Other - ( )										
( )										
Total #	17	4	4	1	1			7		
Total %	50%	12%	12%	3%	3%			20%		

TECHNICAL SKILLS	Excellent	Good	Acceptable	Below Expectations	Poor
COGNITIVE SKILLS					
Anatomy	3	4	1		
Physiology	2	3	3		
Kinesiology	3	5			
Pathological processes	2	3	2	1	
Indications & contraindic.	4	3	1		
COMMUNICATIVE SKILLS					
Verbal	4	3	1		
Written	2	5		1	
Judgemental	4	3	1		
Medical terminology	3	2	3		
TREATMENT SKILLS					
Modalities	7	1			
Exercises	1	7			
Ambulation	3	5			
Functional activities	2	5	1		
Patient prep & evaluation	2	4	1		
Assistance with evaluation and complex Rx procedures	3	2	2		
Total %	47%	38%	13%	2%	___

Physical Therapy

OPEN-END QUESTIONS

What, in your opinion, is the major strength of the Physical Therapist Assistant program provided by De Anza College?

1. The choice of students selected is quite good. Students are interested in PT, and perform well on the job.
2. Clinical training is excellent and thorough. This saves the employer time.
3. By identifying the goals of a treatment program they are able to assess the patient's progress in relation to his/her total program and do not limit themselves to specific treatment.
4. Well prepared in sciences which provide rationales for practice.

What, in your opinion, is the greatest need for improvement in the Physical Therapist Assistant program provided by De Anza College?

1. More emphasis on evaluation and measurement (goniometer)
2. Writing skills. Often times the students leave out "how much assistance was needed" or "how far did the patients walk".
3. PNF exercises. The PTA's spend 80% of their time with patients doing exercises or gait training. The use of PNF exercises is very essential and not difficult.
4. The majority of the PTA's are not strong enough to give an effective massage.
5. More orientation to the specific treatments used in rehabilitation setting.
6. Students must have professional attitude.
7. A greater knowledge of pathology. (i.e., what conditions to expect with a particular diagnosis) Graduates seem to know little of this.

What additional comments or suggestions do you have for De Anza College's Physical Therapist Assistant Program?

1. Students need further instruction on patient handling and transfer techniques. They also need to be aware of which side of a stroke patient they should stand next to when walking.
2. More emphasis on exercise programs.
3. Besides professional manner, students should dress professionally.
4. Tighter screening of clinical settings that you utilize for student experiences.

Physical Therapy

How important is college occupational training at De Anza in relation to other qualifications you consider in making the hiring decision?

5	Very important	1	Of little importance
2	Moderately important		Unimportant

Do you plan to continue employing PTA's?	8	Yes		No
Would you hire another De Anza graduate for a future job in your organization?	8	Yes		No

ANALYSIS

1. Approach

"Findings," can be divided into two categories: (a) those related to procedures and (b) those related to questionnaire responses. In neither case does the data warrant a sophisticated analysis. As stated in the Test Plan, the objective was to "design" and field test a system for obtaining employer feedback on effectiveness of occupational education and training programs and to incorporate this information with ongoing program review and modification processes." Once a workable system is designed, meaningful input data can be obtained.

The approach consisted of having two members from the District Office of Technical Education meet with the instructional deans on each campus to review the purpose and nature of the study, determine the programs to be surveyed and secure approval for meeting with program heads and faculty. Subsequently, the SAM Consortium-developed sample was reviewed with faculty and district representatives, and faculty jointly agreed on contact methods and specific questionnaire items. As a result of these meetings, specialized questionnaires were constructed for each program.

Table I reveals that disparities between the method for contacting the employers as stated in the plan and the method actually used or "executed" occurred in four of the five programs; Auto Technology, Electronics, Photography and Ornamental Horticulture. Reasons for this variance follow:

The Plan called for some combination of up to five different "methods" of contacting these employers. The various "methods," in turn, included four means of communicating with employers: (1) letter (2) questionnaire (3) telephone, and (4) personal interview. The various combinations of these means are detailed under the "methods" heading in Table I.

Unplanned time consumed in identifying employers (see Findings and Results" (Item 3) and project deadline that remained constant resulted in a compressed response period. In order to compensate for this condition, it was assumed that a phone call to an employer prior to his/her receipt of a questionnaire would generally tend to assure earlier returns and, more specifically, would permit immediate identification of the current supervisor. It would also provide immediate feedback should the former student no longer be an employee of a given company or agency. As seen in Table I, this method was added to the pre-service Automotive Technology and Ornamental Horticulture programs. Following the same logic, Item 6, "Telephone Interview Only" was added to both pre-service and inservice Automotive Technology and to Electronics and Photography programs.

An employer follow-up of practicing auto mechanics was also undertaken though unplanned. This came about in meetings with staff for questionnaire development purposes. The staff expressed no less concern for follow-up of their continuing education "product" than their day pre-service students. Staff also believes that training effectiveness could be detected by the supervisor at some point near or upon completion of the concentrated course (six hours per week for nine weeks) or "Clinic." As a consequence, "Clinics" were added to the study and a special employer questionnaire was constructed for this group (see Exhibit II, A-2).

2. Interpretation

The displays of collected data and information (Table II) are self-evident and required no specific interpretation. Further, the posity of program-related data collected in the Pilot Test was insufficient to warrant statistical analysis. On the other hand, it did appear that the method used for tabulating and the format used for displaying the data were satisfactory, will accommodate results of a full study and will lend themselves to reproduction and use by a variety of interested individuals.

As is the case in most survey research, certain unexpected by-products occurred. Of interest in this study were employer responses not anticipated. Included among these responses were (1) some employers expressed appreciation for the opportunity to be contacted (2) some asked to have WEXED students referred to them and, not unexpectedly, (3) most were interested in obtaining copys of the results.

ACTION

1. Dissemination

Parallel to the handling of "analysis of findings," dissemination will vary somewhat between the procedural and the program aspects of the study. Both procedural and program aspects will, of course, be made available to the Field Test Consortium and Project SAM Employer Follow-up Advisory Committee. On the local level, details relating to procedures will have a more limited distribution. These findings will be presented to the District Technical Education Council (three Deans from each college and the District Director of Technical Education), to the division chairpersons and faculty of each program engaged in the current study and to future faculties as their programs are considered for employer follow-up. The purpose, of course, is to share insights gained from first-hand experience with the alternatives before deciding on an acceptable contact method for any given program.

Copies of this report will be disseminated to and reviewed by the District-wide Technical Education Council, appropriate division chairpersons, program heads and instructors. All advisory committees are aware of this pilot study. Findings will be made available to appropriate program advisory committee members and become an agenda item for their consideration at the next scheduled committee meeting.

2. Impact on College Programs

Impact, in terms of planned and actual modification of programs, cannot be determined prior to advisory committee consideration. Following their input, staff will make recommendations which, in turn, will be acted upon according to established procedures.

Conclusions and Recommendations for the Design of Future Employer Follow-up Activities

1. Unless--and until-- needed data for identifying employers and obtaining the "license" to contact them is greatly simplified, future surveys of employers on any regular, systematic basis must necessarily be extremely limited.

   It is recommended that no more than a dozen programs be added to the list to be surveyed in any given year. Thus a five-year period would be required to activate employer follow-up for all of the approximately sixty unduplicated programs offered within this District.

   It is further recommended that all appropriate staff be involved in devising and implementing a plan that will assure student response to the SAM survey at no less than the 75% level and, if employed, identification of the employer/supervisor of at least an 80% level.

   It is also recommended that a master plan be developed for prioritizing programs to be involved in the employer model and such special measures taken as will assure that students completing the programs to be surveyed understand the importance of and cooperate with the student survey endeavor. Examples of criteria that should be considered for continuing and/or adding programs to the Employer Model are:

   (a) Faculty has carried out independent employer follow-up on an annual basis. District OTE could cooperate and provide an ongoing service function.

   (b) Current Field Test data (though inadequate) indicates sufficient employer dissatisfaction to warrant a more complete study.

   (c) Advisory committees and staff perceive a need for major program revision.

   (d) New programs having first "completors" in the world of work.

   (e) Programs having marginal enrollments.

   (f) Low Placements.

2. The validity of data gathered from employers varies directly with the degree of comprehensiveness of the representative sample of employers surveyed. Therefore, any procedure that reduces the potential universe of employers reduces the

validity of the study. Mandating student permission to contact his/her employer/supervisor reduces the employer universe in two ways: (a) if the student does not respond to the appropriate question on the SAM student survey or (b) if the student's response is "no" that employer may not be contacted and, of course, the "universe" is reduced.

It is recommended that local and state staff and committees restudy the necessity for obtaining student permission to contact an employer and seek ways and means for removing this barrier to maximum employer participation.

3. In order to obtain optimum results for program improvement purposes, questionnaires must be specifically tailored to the program and occupation(s) for which it prepares. Staff assistance in this endeavor and their insights into the characteristics of the typical employer and work situation are most helpful in determining the contact method to be employed.

   The practice of securing staff (a) participation in constructing questionnaires which are directly related to individual programs and (b) assistance in obtaining optimum employer response should be continued. Staff in two programs, Photography and Electronics, are of the opinion that the time lapse between leaving a program and conducting follow-studies with employers should not be attempted before two or three years on the job. There exists the possibility that in some work situations a time span of this duration is required for a variety of job experiences which will reveal the range of cognitive kinds of skills which the former students possess.

   It is recommended that steps be taken to test the hypotheses that a longer time span (e.g., two to three years) would yield more positive data on training effectiveness.

4. Staff generally approved of the "essential" verses "non-essential" ratings for a list of potential job skills. Some employer respondents, for some skills, found this "either-or" choice too extreme.

   It is recommended that future questionnaires employing this format insert a "useful" column heading between the two extremes.

5. Questionnaires sent to supervisors in large businesses and industries seemed frequently to not reach the person for whom the questionnaire was intended.

   It is recommended that District and/or College staff meet with business and industry personnel department representatives, explain the purpose of the survey and attempt to secure their cooperation by sending questionnaires to the department which, in turn, will be delivered to the appropriate supervisor.

6. Much clerical time was consumed going through complete, computer-printed, alphabetical listings of vocational education students and manually listing completors of programs being surveyed.

   It is recommended that future computer print-outs of SAM occupational students be available on a program rather than a straight alpha listing basis.

7. Program advisory committees, at best, are a relatively small and, perhaps for good and sufficient reason, not a statistically sound random sample of the range of employers and occupations they represent. The addition of the employer component to SAM has the potential for broadening the data base, for program planning, revision and evaluation purposes.

   It is recommended that the results of each program surveyed be reviewed by appropriate staff, made available to the program advisory committee members and utilized as an additional source of information available to the committee for program advisement purposes.

8. It is the judgement of the project's data specialist that the telephone proved to be an efficient, effective and satisfactory information gathering tool. An exception appeared in the automotive trades. It is conceivable that relatively (a) heavy work pressures, (b) relatively high labor charges and (c) standardized repair rates, and quotas tended to discourage telephone discourse.

   It is recommended that the current use of the questionnaire coupled with various telephone alternatives be continued in future surveys, that special attention be given to kinds of job situations likely to be encountered and, if generally acceptable methods are unproductive, staff should be prepared to experiment with other methods including the personal interview.

9. While admittedly not statistically significant, as a result of constraints previously mentioned, there is some evidence that employer input differed markedly from information revealed in advisory committee minutes.

   It is recommended that advisory committee minutes be reviewed and that any wide disparities between inputs from advisory committee members and those from employer responses be analyzed in terms of job performance requirements by conducting formal surveys and by examining the composition of advisory committees.

10. Employer follow-up is an involved, arduous task but is judged to be a desirable and practical means of helping build the data base needed for comprehensive program planning and evaluation purposes.

    It is almost axiomatic that time is a factor that must be considered seriously in attempting surveys of this nature (see Exhibit "G"). Even assuming sufficient and satisfactory student-provided employer information on a dozen new programs, a period of approximately three months should be allowed in order to carry out the activities outlined in this study. Assuming that employer follow-up surveys are part of the professional responsibilities of occupational instructors and administrators, the personnel requirement for applying the system to ten to twelve programs and involving 500 employers will approximate one "man-month" for clerical and support kinds of services. Assuming a cost for clerical assistance and materials of $1,000, the cost of employer return would amount to $2.00.

    It is recommended that employer follow-up become an annual, ongoing activity and this activity continue to be a cooperative venture on the part of the District Office of Technical Education, College administrators and occupational education faculty with the District conducting the survey as one of its service functions. Priorities of the District Office should be established in a manner that will permit the inclusion of this function without an increase in existing staff.

Exhibit A-1

FOOTHILL COMMUNITY COLLEGE DISTRICT

DE ANZA &
FOOTHILL COLLEGES

12345 El Monte Road
Los Altos Hills
California 94022
(415) 948-3523

What's this?

A questionnaire which you need not fill out. We do, however, need your cooperation when I or a representative from my office phones you sometime in the next few days.

Why me?

Because our records show that you are the employer/supervisor of at least one person who completed all or a significant portion of our Automobile Technology education and training program. Only you are in a position to judge the adequacy of this program in terms of job entry skill requirements.

So what?

Occupational Education is expensive--to the student and taxpayer alike--we can't afford to be wrong. The information you provide will be used to assure that future students will get the training you, our employers, need.

Remember, it's the program we want evaluated--not our former student.

You'll be hearing from us. Thanks in advance for your cooperation.

Sincerely,

Les Schwoob
Director of Automotive Technology

mk
Enclosure

Exhibit A-2

EMPLOYER'S EVALUATION OF THE AUTOMOTIVE TECHNOLOGY PROGRAM AT DE ANZA COLLEGE

The job title(s) to which this evaluation applies is:__________________________.

1. Please evaluate the overall effectiveness of the De Anza Automotive Technology program by checking whether the job skill items are "Essential" or "Non-essential" to the above job in your organization and your rating of De Anza's effectiveness in training for those items.

Essential	Non-Essential	JOB SKILLS ITEMS	Excellent	Good	Acceptable	Below Expectations	Poor
___	___	a. Technical Knowledge	___	___	___	___	___
___	___	b. Operation of Equipment	___	___	___	___	___
___	___	c. Writing skills	___	___	___	___	___
___	___	d. Verbal Communications	___	___	___	___	___
___	___	e. Computational Skills	___	___	___	___	___
___	___	f. Pre-employment procedures (application, interview, personal appearance)	___	___	___	___	___
___	___	g. Orienting individuals to employment (punctuality,attendance,attitude)	___	___	___	___	___
___	___	h. Others (specify) ____________________	___	___	___	___	___
		____________________________________	___	___	___	___	___

2. How important is formal Automotive training in relation to other qualifications you consider in making the hiring decision?

___Very important
___Moderately important
___Of little importance
___Unimportant

3. Would you hire another De Anza Automotive Technology graduate for a future job in your organization?

___Yes ___No

OPEN-END QUESTIONS (Use reverse side if additional space is required)

What, in your opinion, is the major strength of the Automotive Technology training provided by De Anza College?

What, in your opinion, is the greatest need for improvement in the Automotive Technology training provided by De Anza College?

What additional comments or suggestions do you have for De Anza College's Automotive Technology training programs?

___Please send me a copy of the completed survey.

Exhibit B

Dear________________________________:

Staff responsible for the Auto Clinics at De Anza College need your input in order to determine the effectiveness of the training provided.

We get feedback from practicing mechanics in these clinics but employer ratings are lacking.

Please take a few minutes to reply to the following questions. The information you provide will help us do a better training job for you.

Sincerely yours,

Les Schwoob, Executive Head
Automotive Technology Program

JOB SKILL ITEMS	Very Definitely	Somewhat	Very Little	Don't Know
1. Do the clinics improve the confidence level of a mechanic?	___	___	___	___
2. Do the clinics improve a mechanic's ability to analyze problems?	___	___	___	___
3. Do the clinics improve a mechanic's ability to take proper steps for correcting a problem?	___	___	___	___
4. Do the clinics broaden a mechanic's abilities?	___	___	___	___

OPEN-ENDED QUESTIONS (Use reverse side if more space is needed)

What, in your opinion, is the major strength of the Automotive Technology training provided by De Anza College?

What, in your opinion, is the greatest need for improvement in the Automotive Technology training program provided by De Anza College?

What additional comments or suggestions do you have for De Anza College's Automotive Technology Program?

4/28/76

Exhibit C-1

FOOTHILL COMMUNITY COLLEGE DISTRICT

DE ANZA &
FOOTHILL COLLEGES

12345 El Monte Road
Los Altos Hills
California 94022
(415) 948-3523

What's this?

A questionnaire which you need not fill out. We do, however, need your cooperation when I or a representative from my office phones you sometime in the next few days.

Why me?

Because our records show that you are the employer/supervisor of at least one person who completed all or a significant portion of our Electronics education and training program. Only you are in a position to judge the adequacy of this program in terms of job entry skill requirements.

So what?

Occupational Education is expensive--to the student and taxpayer alike--we can't afford to be wrong. The information you provide will be used to assure that future students will get the training you, our employers, need.

Remember, it's the program we want evaluated--not our former student.

You'll be hearing from us. Thanks in advance for your cooperation.

Sincerely,

Paul L. Evans
Electronics

mk
Enclosure

Exhibit C-2

EMPLOYER'S EVALUATION OF ELECTRONICS PROGRAMS AT FOOTHILL COLLEGE

The job title(s) to which this evaluation applies is: ______________________

____

1. Please evaluate the overall effectiveness of the Foothill electronics training program by checking whether the job skill items are "Essential" or "Non-essential" to the above job in your organization and your rating of Foothill's effectiveness in training for those items.

Essential	Non-Essential	JOB SKILLS ITEMS	Excellent	Good	Acceptable	Below Expectations	Poor
__	__	a. Technical knowledge of electron. theory	__	__	__	__	__
__	__	b. Operation of equipment & instruments	__	__	__	__	__
__	__	c. Writing skills	__	__	__	__	__
__	__	d. Verbal communications	__	__	__	__	__
__	__	e. Computational skills	__	__	__	__	__
__	__	f. Pre-employment procedures (application, interview, personal appearance)	__	__	__	__	__
__	__	g. Orienting individuals to employment (punctuality,attendance,attitude)	__	__	__	__	__
__	__	h. Others (specify) ______________	__	__	__	__	__
__	__	______________________	__	__	__	__	__

2. How important is college level electronics training in relation to other qualifications you consider in making the hiring decision?

___Very important ___Of little importance

___Moderately important ___Unimportant

3. Would you hire another Foothill graduate for a future job in your organization?

___Yes ___No

OPEN-END QUESTIONS (Use reverse side if additional space is required)

What, in your opinion, is the major strength of the occupational training provided by Foothill College?

What, in your opinion, is the greatest need for improvement in the occupational training provided by Foothill College?

What additional comments or suggestions do you have for Foothill College's occupational training programs?

___Please send me a copy of the completed survey.

Exhibit D-1

FOOTHILL COMMUNITY COLLEGE DISTRICT

DE ANZA &
FOOTHILL COLLEGES

12345 El Monte Road
Los Altos Hills
California 94022
(415) 948-3523

De Anza College's Physical Therapist Assistant program is conducting student and employer follow-up studies to determine the quality of job preparation our college provides. Feed-back information will assist in our curriculum revision and development process.

According to our records ___STUDENT'S NAME___ is currently employed by your organization. Your input is vital in that it gives us the employer's point of view. In responding to the questionnaire please remember it's the program, NOT the student that's being evaluated. However, if confidentiality is a concern you should know that we have signed releases from our graduates which allows us to obtain this kind of information.

Will you kindly take a few minutes today to complete and return the questionnaire.

A stamped envelope is enclosed for your convenience.

Thank you for your cooperation.

Sincerely,

Frances A. Lupi
Physical Therapy

gs
Enclosure

Exhibit D-2

DE ANZA COLLEGE

PHYSICAL THERAPIST ASSISTANT PROGRAM

FACILITY NAME ______________________ DATE COMPLETED ____________

ADDRESS ____

Please check correct response unless otherwise indicated.

1. ___General hospital
2. ___Rehab. facility
3. ___Private practice
4. ___ECF
5. ___Out-patient clinic
6. ___Pediatric facility
7. Other (specify) ________________________________

JOB DUTIES OF PTA:

Please indicate time spent weekly by placing number indicating appropriate percentage range in blanks preceding listed duties.

Duties

___Patient care
___Preparation & clean up
___Clerical
___Conferences/meetings
___In-service
___Student affiliation programs (RPT & PTA)
___Other (specify)
____
____

Percentages

1. 0-10%
2. 11-20%
3. 21-30%
4. 31-40%
5. 41-50%
6. 51-60%
7. 61-70%
8. 71-80%
9. 81-90%
10. 91-100%

PTA RECEIVES FORMAL EVALUATION EVERY:

1. ___3 months
2. ___6 months
3. ___yearly
4. ___never
5. ___Other (specify) ______________

PTA EVALUATION GIVEN BY:

1. ___Chief RPT
2. ___Senior RPT
3. ___ Staff RPT
4. ___ Other (indicate)

____

____

NATURE OF SUPERVISION:

Check appropriate column.	DAILY	WEEKLY
1. On premise	___	___
2. Phone	___	___
3. Written	___	___
4. Other (explain & indicate frequency)	___	___

____

____

____

How would you rate the effectiveness of De Anza College in training for each of the following areas? Space has been provided for you to rate training in specific skills that are essential for your facility.

	Excellent	Good	Acceptable	Below Expectations	Poor
COGNITIVE SKILLS					
a. Anatomy					
b. Physiology					
c. Kinesiology					
d. Pathological processes					
e. Indications & contraindic.					
COMMUNICATIVE SKILLS					
f. Verbal					
g. Written					
h. Judgemental					
i. Medical terminology					
TREATMENT SKILLS					
j. Modalities					
k. Exercise					
l. Ambulation					
m. Functional activities					
n. Patient prep & evaluation					
o. Assistance with evaluation and complex Rx procedures					
TECHNICAL SKILLS					
How would you rate the overall effectiveness of the technical training provided by De Anza college?					
How would you rate the effectiveness of De Anza's programs in orienting individuals to employment? (i.e., work attitude, attendance, cooperation with co-workers & management).					
How would you rate the effectiveness of De Anza's programs in preparing individuals for pre-employment procedures? (i.e., the interview, application, personal presentation).					

How important is college occupational training at De Anza in relation to other qualifications you consider in making the hiring decision?

1. ___ Very important
2. ___ Moderately important
3. ___ Of little importance
4. ___ Unimportant

Do you plan to continue employing PTA's? ___Yes ___No

Would you hire another De Anza graduate for a future job in your organization? ___Yes ___No

If not, please explain. ____

____

____

OPEN-END QUESTIONS (Use reverse side if additional space is required)

What, in your opinion, is the major strength of the Physical Therapist Assistant Program provided by De Anza College?

What, in your opinion, is the greatest need for improvement in the Physical Therapist Assistant Program provided by De Anza College?

What additional comments or suggestions do you have for De Anza College's Physical Therapist Assistant Program?

___Please send me a copy of the completed survey.

Exhibit E-1

FOOTHILL COMMUNITY COLLEGE DISTRICT

DE ANZA &
FOOTHILL COLLEGES

12345 El Monte Road
Los Altos Hills
California 94022
(415) 948-3523

What's this?

A questionnaire which you need not fill out. We do, however, need your cooperation when I or a representative from my office phones you sometime in the next few days.

Why me?

Because our records show that you are the employer/supervisor of at least one person who completed all or a significant portion of our Photography education and training program. Only you are in a position to judge the adequacy of this program in terms of job entry skill requirements.

So what?

Occupational Education is expensive--to the student and taxpayer alike-- we can't afford to be wrong. The information you provide will be used to assure that future students will get the training you, our employers, need.

Remember, it's the program we want evaluated--not our former student.

You'll be hearing from us. Thanks in advance for your cooperation.

Sincerely,

George Craven
Photography

mk
Enclosure

Exhibit E-2

EMPLOYER'S EVALUATION OF PHOTOGRAPHY PROGRAM AT DE ANZA COLLEGE

The job title(s) to which this evaluation applies is______________________________.

1. How would you rate the effectiveness of De Anza College in training for each of the following areas. Space has been provided for you to rate training in specific skills that are essential for your facility.

Essential	Non-Essential	JOB SKILL ITEMS	Excellent	Good	Acceptable	Below Expectation	Poor
___	___	a. General operation of equipment	___	___	___	___	___
___	___	b. Skill in visualizing images/pictures	___	___	___	___	___
___	___	c. Gen. knowledge of black & white processes	___	___	___	___	___
___	___	d. General knowledge of color processes	___	___	___	___	___
___	___	e. Verbal Communications	___	___	___	___	___
___	___	f. Problem solving ability	___	___	___	___	___
___	___	g. Knowledge of cinema production skills	___	___	___	___	___
___	___	h. Knowledge of cinema laboratory techniques	___	___	___	___	___
___	___	i. Other____________________	___	___	___	___	___
		2. How would you rate the effectiveness of our program in preparing individuals for pre-employment procedures? (i.e., the interview, application, personal preparation)	___	___	___	___	___

3. How important is De Anza's photography training in relation to other qualifications you consider in making the hiring decision?

___Very important   ___Of little importance
___Moderately important   ___Unimportant

4. Would you hire one of De Anza's graduates for a future job in your organization?
___Yes   ___No If not, please explain.____________________________

OPEN END QUESTIONS (For additional space use revers side)

What, in your opinion, is the major strength of the Photography program provided by De Anza College?

What, in your opinion, is the greatest need for improvement in the Photography program provided by De Anza College?

What additional comments or suggestions do you have for De Anza College's Photography programs?

___Please send me a copy of the completed survey.

Exhibit F-1

**FOOTHILL
COMMUNITY
COLLEGE
DISTRICT**

DE ANZA &
FOOTHILL COLLEGES

12345 El Monte Road
Los Altos Hills
California 94022
(415) 948-3523

What's this?

A questionnaire which you need not fill out. We do, however, need your cooperation when I or a representative from my office phones you sometime in the next few days.

Why me?

Because our records show that you are the employer/supervisor of at least one person who completed all or a significant portion of our Ornamental Horticulture education and training program. Only you are in a position to judge the adequacy of this program in terms of job entry skill requirements.

So what?

Occupational Education is expensive--to the student and taxpayer alike--we can't afford to be wrong. The information you provide will be used to assure that future students will get the training you, our employers, need.

Remember, it's the program we want evaluated--not our former student.

You'll be hearing from us. Thanks in advance for your cooperation.

Sincerely,

William R. Patterson
Coordinator, Ornamental Horticulture

mk
Enclosure

EMPLOYER'S EVALUATION OF FOOTHILL COLLEGE'S ORNAMENTAL HORTICULTURE PROGRAM

Exhibit F-2

Please specify job title(s) to which this information applies. ____________________.

TECHNICAL SKILLS

Please identify which of the following are "Essential" or "Non-essential" to this job in your organization. How would you rate the effectiveness of Foothill College's training for each of these skills. Space has been provided for you to check and rate training in specific skills essential for the job.

Essential	Non-essential	JOB SKILL ITEMS	Excellent	Good	Acceptable	Below Expectations	Poor
___	___	a. Operation of Equipment	___	___	___	___	___
___	___	b. Writing Skills	___	___	___	___	___
___	___	c. Verbal Communication	___	___	___	___	___
___	___	d. Computation Skills	___	___	___	___	___
___	___	e. Knowledge of Plant Materials	___	___	___	___	___
___	___	f. Knowledge of Construction	___	___	___	___	___
___	___	g. Knowledge of Plant Desease & Pests	___	___	___	___	___
___	___	h Knowledge of Design	___	___	___	___	___
___	___	i. Knowledge of Irrigation Systems	___	___	___	___	___
___	___	j. Other ____________________	___	___	___	___	___
		1. How would you rate the effectiveness of Foothill's programs in preparing individuals for pre-employment procedures? (i.e., interview, application, appearance).	___	___	___	___	___
		2. How would you rate the effectiveness of Foothill's programs in orienting individuals to employment? (i.e., work attitude, attendance, cooperation with co-workers & management).	___	___	___	___	___

3. How important is Foothill's Ornamental Horticulture training in relation to other qualifications you consider in making the hiring decision?

___Very important ___Of little importance
___Moderately important ___Unimportant

4. Would you hire another of Foothill's graduates for a future job in your organization?
___Yes ___No

OPEN-END QUESTIONS (Use reverse side if additional space is required)

What, in your opinion, is the major strength of the Ornamental Horticulture training provided by Foothill College?

What, in your opinion, is the greatest need for improvement in the Ornamental Horticulture training provided by Foothill College?

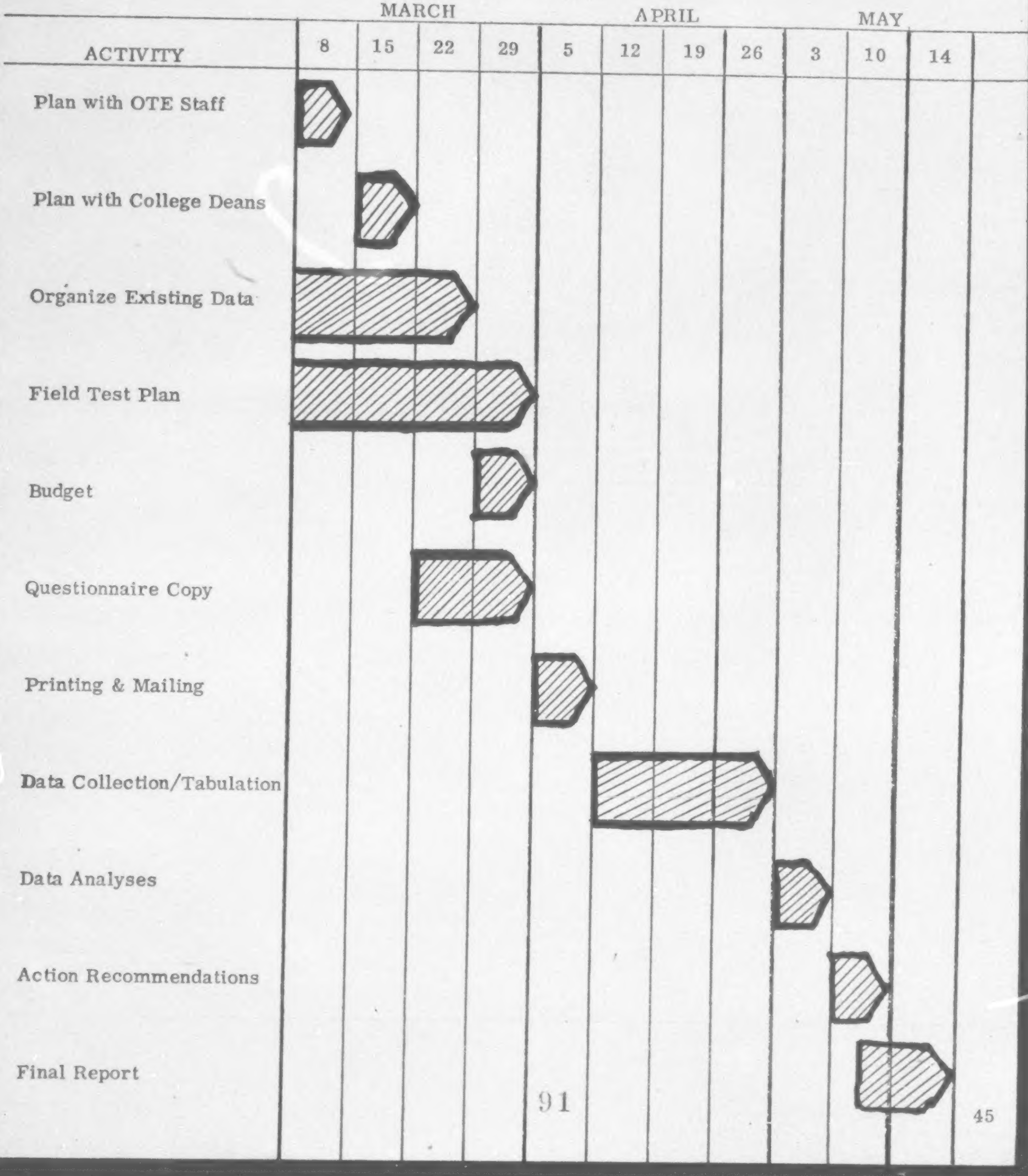
What additional comments or suggestions do you have for Foothill College's Ornamental Horticulture training programs?

___Please send me a copy of the completed survey.

Exhibit G

FOOTHILL-DE ANZA COMMUNITY COLLEGE DISTRICT
Office of Technical Education

SAM Follow-up Time Schedule



	MARCH				APRIL				MAY		
ACTIVITY	8	15	22	29	5	12	19	26	3	10	14
Plan with OTE Staff	▨										
Plan with College Deans		▨									
Organize Existing Data	▨	▨	▨								
Field Test Plan	▨	▨	▨	▨							
Budget				▨							
Questionnaire Copy			▨	▨							
Printing & Mailing					▨						
Data Collection/Tabulation						▨	▨	▨			
Data Analyses									▨		
Action Recommendations										▨	
Final Report										▨	▨

SAM EMPLOYER FOLLOW-UP
FIELD TEST REPORT
SAN DIEGO COMMUNITY COLLEGE DISTRICT

Department
of
Manpower Training and Vocational Education

May 25, 1976 San Diego, California

INTRODUCTION

Among the more critical aspects of all occupational preparation programs are the skills evidenced by the students' transition into new employment.

In order to develop an indicator of overall instructional effectiveness of specific occupational programs, a follow-up study was conducted, utilizing employer evaluations of former student job transition as the basic index of quality of the program.

The two occupational programs utilized in this employer follow-up operation, Aviation Maintenance Technology and Electronics Technology, represent well-established technical education programs at San Diego Miramar, and San Diego Mesa Colleges. These programs were selected because they reflect rapidly changing technologies and are therefore acutely in need of continual feedback from employers and industry, and provided classes large enough to furnish significant employment feedback.

REVIEW OF OBJECTIVES

1. To establish an indication of overall instructional effectiveness in selected occupational programs by conducting an employer follow-up study of June 1975 graduates.
2. To develop a vehicle to facilitate articulation with appropriate employers to provide needed program/course revisions.
3. To provide an opportunity for instructional/follow-up personnel to interact with operational supervisory personnel.

PRESENTATION OF FINDINGS

Population - Students selected for the employer follow-up were those students identified in the SAM student follow-up system as being employed in the occupational field for which they were trained. This provided eleven (50%) appropriately employed students of a class of 22 in Aviation Maintenance Technology, and seven (30%) of a class of 23 in Electronic Technology. No attempt was made to obtain updated information on students who secured appropriate employment after the SAM follow-up was completed in November, 1975.

Design - The method of investigation utilized two steps, including an initial phone contact with the student to secure inquiry permission, and a phone and personal discussion with appropriate employer personnel. The student phone contact generally served well to begin the follow-up process, with both home and/or business numbers being used to reach the student. The use of a business number was tempered by the type of employment involved.

Employer response to this critical input point was without exception very positive, and not only resulted in providing data for the stated objectives of the study, but served as a communication vehicle in other areas of common interest (see Evaluation of Data).

Instrument - The follow-up questionnaires used in the two disciplines were similar in format (see Analysis of Data) and provided for objective evaluation of specific job-related activities and operations, as well as space for additional subjective comments. The latter provided information related to both curriculum specifics and general quality of job entrant.

In administering the questionnaires, follow-up personnel made a concerted effort to convey to employers that the information being sought was to be reflective of the skills and capabilities brought into the job, and evidenced during the transition period. This process was not to be a specific job performance evaluation.

Analysis of Data - A simple mean and mode was calculated for each question in the Technical and General Knowledge Areas, based on a number value assigned to response columns, with (4) corresponding to "Excellent", decreasing to (-1) for a "Poor" rating.

The results of this analysis are indicated on the accompanying sample questionnaires.

SAM EMPLOYER FOLLOW-UP STUDY
QUESTIONNAIRE

In order to provide students with the training needed to succeed in the aircraft maintenance industry, it is most important that we obtain information from operational level personnel as to the adequacy of the present job preparation training program.

We are, therefore, asking for your evaluation of effectiveness of the training brought to the job by these former students. We would like to emphasize, our request is for information concerning the instructional program, and is not a personnel performance report.

Please rate the following job-related areas as an indication of how well-prepared students were for transition into your operation.

	(4) Excellent	(3) Good	(2) Acceptable	(1) Below Expectations	(-1) Poor	(N/A) Not Needed For Job	Mn	Mo
1. Technical Knowledge Areas								
A. Aircraft Systems Operation	[6]	[3]	[ ]	[ ]	[ ]	[2]	3.7	4
B. Powerplant Systems Operation	[5]	[4]	[ ]	[ ]	[ ]	[2]	3.6	4
C. Malfunction Analysis and Applications to Troubleshooting	[5]	[2]	[1]	[ ]	[ ]	[3]	3.5	4
D. Test Equipment Applications	[5]	[2]	[ ]	[ ]	[ ]	[4]	3.7	4
E. Maintenance and Repair Operations and Skills	[8]	[1]	[ ]	[ ]	[ ]	[2]	3.9	4
F. Interpretation and Application of Technical Data and Publications	[8]	[2]	[ ]	[ ]	[ ]	[1]	3.8	4
G. Maintenance Forms and Records; F.A.R.'s	[4]	[3]	[ ]	[ ]	[ ]	[4]	3.6	4

H. Additional Comments: ____________________

____

____

	(4) Excellent	(3) Good	(2) Acceptable	(1) Below Expectations	(-1) Poor	(N/A) Not Needed For Job	Mn	Mo
2. General Knowledge Areas								
A. Computation Skills	[7]	[3]	[ ]	[1]	[ ]	[ ]	3.7	4
B. Written Communication Skills	[5]	[6]	[ ]	[ ]	[ ]	[ ]	3.5	3
C. Verbal Communication Skills	[6]	[4]	[ ]	[ ]	[ ]	[ ]	3.6	4
D. Ability to Work with Others	[9]	[2]	[ ]	[ ]	[ ]	[ ]	3.8	4
E. Ability to Follow Directions	[9]	[2]	[ ]	[ ]	[ ]	[ ]	3.8	4
F. Exhibits Potential for Continued Job Growth	[8]	[3]	[ ]	[ ]	[ ]	[ ]	3.7	4

G. Based on Your Experience -- Would You Recommend Hiring Future Graduates From Our Program

Yes [11] No [ ]

H. Additional Comments: ____________________

____

____

SAM EMPLOYER FOLLOW-UP STUDY
QUESTIONNAIRE

In order to provide students with the training needed to succeed in the electronics industry, it is most important that we obtain information from operational level personnel as to the adequacy of the present job preparation training program.

We are, therefore, asking for your evaluation of effectiveness of the training brought to the job by these former students. We would like to emphasize, our request is for information concerning the instructional program, and is not a personnel performance report.

Please rate the following job-related areas as an indication of how well-prepared students were for transition into your operation.

1. Technical Knowledge Areas	(4) Excellent	(3) Good	(2) Acceptable	(1) Below Expectations	(-1) Poor	(N/A) Not Needed For Job	Mn	Mo
A. Basic Circuit Operation	[ ]	[4]	[2]	[ ]	[ ]	[ ]	2.4	3
B. Circuit Analysis and Application to Troubleshooting	[ ]	[ ]	[3]	[3]	[ ]	[ ]	1.7	2
C. Test Equipment Applications	[3]	[2]	[2]	[ ]	[ ]	[ ]	3.1	4
D. Maintenance and Repair Operations and Skills	[ ]	[3]	[3]	[1]	[ ]	[ ]	2.3	3
E. Interpretation and Application of Technical Data and Publications	[ ]	[3]	[3]	[1]	[ ]	[ ]	2.3	3

F. Additional Comments: ____________________

2. General Knowledge Areas	(4) Excellent	(3) Good	(2) Acceptable	(1) Below Expectations	(-1) Poor	(N/A) Not Needed For Job	Mn	Mo
A. Computation Skills	[ ]	[3]	[4]	[ ]	[ ]	[ ]	2.4	2
B. Written Communication Skills	[ ]	[3]	[4]	[ ]	[ ]	[ ]	2.4	2
C. Verbal Communication Skills	[ ]	[4]	[3]	[ ]	[ ]	[ ]	2.6	3
D. Ability to Work with Others	[2]	[5]	[ ]	[ ]	[ ]	[ ]	3.3	3
E. Ability to Follow Directions	[2]	[3]	[2]	[ ]	[ ]	[ ]	3.0	3
F. Exhibits Potential for Continued Job Growth	[1]	[3]	[2]	[1]	[ ]	[ ]	2.6	3

G. Based on Your Experience -- Would You Recommend Hiring Future Graduates From Our Program	Yes	No
	[6]	[ ]

H. Additional Comments: ____________________

Evaluation of Data - A meaningful statistical evaluation of data was not possible, since the student population and sample analyzed was far too small to develop any significant statistical information.

There are, however, some useful generalities that are evident from the data. These are proffered for each of the disciplines as follows:

Aviation Maintenance Technology

1. Technical Knowledge Areas - Information developed from eleven (11) students indicated a very high overall rating of the job-related technical knowledge evidenced upon entering employment.
2. General Knowledge Areas - The overall evaluation of student capabilities in these areas, although appropriate to most types of employment, was about equal to the ratings of the technical areas, i.e., quite high.
3. Based on the overall performance of the student employee, all eleven employers would recommend future hiring of program graduates.
4. Additional Comments

   Technical Knowledge Areas

   a. Outstanding - owner can leave shop for 2-3 days & all work will be done & done correctly.
   b. Understanding - outstanding.
   c. Best man they've had from our school.
   d. He is employing people for Solar. They feel that his experience in the military & the knowledge obtained at our school has enabled him to be successful in his job.

General Knowledge Areas

a. If job is completed he will sweep out hangar, straighten up parts bins or anything that needs doing.

b. Moves - slow.

Electronic Technology

1. Technical Knowledge Areas - Evaluation of very limited data indicates differing levels of preparation in these job knowledge areas. In general, the basic knowledge and skills-related areas were rated between acceptable and good, while advanced concepts indicated by "Circuit Analysis and . . .Troubleshooting" were rated somewhat lower.

2. General Knowledge Areas - Overall ratings reflected acceptable to good ratings, with "Ability to Work with Others" rated above the other categories.

3. Responses indicating employer's recommendation for future hiring of program graduates reflected six (6) of seven (7) affirmative replies. The single non-affirmative response was "no recommendation", rather than a negative reply (see Additional Comments).

4. Additional Comments

Technical Knowledge Areas

a. Excellent learner & enjoys electronics.

b. Student had no knowledge of tube theory & operational amplifiers.

c. Theory of operational amplifiers. Field effect transistors.

d. He seemed more prepared for engineering technology - had difficulty accepting that a unit could be built wrong.

e. In reference to B., people tend to overlook assembly errors when troubleshooting, and expect trouble-free design.

General Knowledge Areas

a. Since student is first experience with SDCC graduate, I have no basis for comparison and would not make a recommendation on one person.

b. I realize that most students in the program at Mesa are ex-military and have some experience, but something should be done for those who don't know Ohm's law before they get in school.

c. Seemed to feel he had all the education he required, and that continued study of "State of the Art" technology was unnecessary.

d. I would rate Mesa students higher than any other comparable school or technical institution in San Diego.

Information Relating to Objectives - Much dialogue was developed between employers/operational supervisory personnel, and follow-up personnel. This dialogue was without exception very constructive. Information developed through these discussions included:

1. Recommendations relating to specific course/curriculum improvements;
2. Instructional equipment recommendation;
3. Possible sources of instructional supplies and equipment;
4. Requests for future student job referrals;
5. Development of improved rapport with, and access into these instructional programs.

Limitations - It is recognized that many significant limitations were present in the employer follow-up study. These limitations represent formidable constraints in producing a valid educational research method and instrument. Limitations include:

1. An indication of overall student preparation/instructional effectiveness cannot be developed from the population available in a single class.
2. Additional follow-up population could be identified if a post-SAM contact were initiated to identify students who obtained appropriate employment after the suspense date of the SAM Follow-Up.
3. Due to the inherent mobility of persons employed in the aviation industry, four (4) additional employed students had left this geographical area, and were not available to follow-up personnel, although appropriately employed.
4. Many (seven) of the Electronic Technology graduates were pursuing advanced electronic education programs at four-year institutions and were therefore not included, although active in the technology.
5. Two additional Electronic Technology graduates were active-duty military electronics personnel, but were ADCOP graduates and were no longer in the area.
6. Information developed by follow-up personnel was influenced greatly by their related technical and professional skills, and their ability to relate to the employer/supervisor needs.

SUMMARY AND CONCLUSIONS

A review of the information developed and of the Objectives of the Study indicates the following:

1. An employer follow-up study utilizing the methodology described herein is of use in developing information concerning student transition into a technical employment field.
2. In order to obtain an accurate reflection of the overall instructional program effectiveness, two or more follow-up efforts will be necessary, possibly involving several classes.
3. The personal dialogue developed between technical personnel in industry and education provides a worthwhile forum to address the needs for, and details of, course/curriculum improvements.
4. Instructional/follow-up personnel gained the opportunity to visit companies and operations not previously included in their realm of exposure. They were often invited to return in the future.

RECOMMENDATIONS

1. Future employer follow-up studies could be very useful in revising courses/curriculums in occupational education programs. However, these follow-up activities must be based on information developed from more than one class.
2. Information developed by an employer follow-up will be more effective when integrated with other forms of feedback information such as advisory committees, technical seminars, field trips, and other modes of communications.

3. Employer follow-up studies may be more effective when applied to instructional programs that exhibit symptoms of the lack of enrollment, low placement, lack of staff involvement in the field, low levels of employer involvement, or programs involving rapidly changing technology.
4. The efforts required in terms of time, personnel, and resources to implement the personal contacts portion of the follow-up operation were a very positive force in meeting the objectives of study.
5. A crucial element in this, or any personal contact-type of employer follow-up, is the ability of the follow-up personnel to relate technically and professionally to the employer/supervisor operational requirements.
6. Some occupational programs would not lend themselves to this type of follow-up study, especially where production operations, safety, or other operational or personnel factors would make personal contact unwise.
7. Advisory committee membership may be updated as a result of increased employer communications.

DLN:mld
5-27-76

SAN JOSE CITY COLLEGE 1976
STUDENT ACCOUNTABILITY MODEL

STUDENT, EMPLOYER ELECTRONIC/LASER TECHNOLOGY
FIELD FOLLOW-UP TEST
FOR
OCCUPATIONAL PROGRAMS

Coordinated by:

Beatrice Cossey
Consultant

Directed & Prepared by:

Dr. Greg Ohanneson
Assistant Dean of Instruction
Occupational Education

Edited by: Dr. Paul P. Preising
District Director-Grants/Research

SAN JOSE CITY COLLEGE SAM EMPLOYER FOLLOW-UP FIELD TEST PLAN

Contact person and Field Test Coordinator: Dr. Greg S. Ohanneson, Assistant Dean of Instruction, Occupational Education.

1. District and College Information:

   San Jose Community College District, San Jose City College, 2100 Moorpark Avenue, San Jose, CA 95128; phone (408) 298-2181 Ext. 282.

2. Method

   a. College Objective: To collect employer data in sufficient depth to stimulate program improvement as indicated.

   b. District and Campus Participants:

      - Dr. Paul Preising, District Director of Grants and Research
      - Mr. Earl Webb, Assistant to the President, Evergreen Valley College
      - Mr. Bill Deem, Electronics Department Chairman, San Jose City College

   c. Activities:

      1. Occupational program involved: Electronics/Laser
      2. Instrument Design: Ohanneson, Deem et al., Preising, Webb
      3. Sampling: The total population was polled. Students contacted numbered 480. Employers were contacted following written student permission.
      4. Contact Method: Introductory letter with sample questionnaire, followed by telephone calls to obtain the actual survey data (C-1). (See prototype questionnaire attached.)
      5. Identification of Employers was by means of information previously obtained on student survey; project conducted special student survey.
      6. Student-Employer Contact Coordination: Ms. Beatrice Cossey, Consultant, directed by Ohanneson.

7. Data Analysis: Cossey, Ohanneson

3. Findings and Results

a. Followup of students enrolled in Electronics classes

Former San Jose City College students (a total of 480), who were identified as having been enrolled in electronics courses during 1974-75, were contacted by mail to obtain follow-up information about the electronics courses taken. A special follow-up form was constructed (see Appendix A) which (1) enabled quantification of student responses, and, (2) solicited their signed approval to also contact their employer for purposes of an employer follow-up. (See appendix B for project time line.)

Signed employee releases to contact employers were a special condition of this particular follow-up study. This condition was based on the opinion of an advisory group, which argued that if employers were contacted without obtaining former student/employee releases, the college might be liable for invasion of personal privacy.

Intensive efforts were made to contact students and to obtain permission to contact their employers. Two mailings were made to all 480 students (see Table 1). Phone numbers were located for 265 students and all of these numbers were called at least twice. A total of 178 (37%) had no listed or locatable telephone number. Of the 265 telephone calls made, 78 (29%) had either moved, had phones disconnected, or had given a wrong number. Fifteen personal visits were made to various categories of addresses. All visitations were negative

The data collected strongly suggest that for this type of survey, with the particular conditions imposed, telephone followup is not a very effective way of contact. Personal visits to former student addresses also proved ineffective and was, in addition, a more expensive method.

It is also apparent that these former students are quite mobile - a large number being totally inaccessable. This fact raises the question of the utility of follow-up of large numbers of students by mail. (See Appendix C)

b. Follow-up of employers of former students

Over half (56%) of the former students who responded by mail did give their permission to contact their employer. The "employer" contacted was the direct supervisor of the former student/employee. Of the 37 employers contacted, 10 (27%) responded by mail and 25 (68%) by telephone for a total response of 95%. (See Table 2)

Clearly, telephone follow-up of employers proved to be a very successful and relatively inexpensive method of employer contact. (See Appendix C)

c. Discussion of student and employer questionnaire

The main section of both the student and the employer questionnaire was designed to provide quantifiable responses. Activity statements pertaining to specific electronics courses were listed and two responses were obtained for each statement; (1) How important was the listed activity for required job performance, and, (2) How well (did the class) prepare the student for the listed activity. Statements were arranged in ascending order of course complexity. Responses were placed on a 1-6 scale to show Low-High importance and mastery.

4. Analysis of findings, comparison of student and employer responses

Course by course comparison of student and employer responses shows considerable correlation. E.g., both groups believed that understanding of Electronics principles (Q.1) and knowledge of electronic math (Q.7) were very important; both groups indicated that the courses were effective in preparing the student in these areas. (Table 3, 4 & 5)

Specialty courses (e.g., radio (Q.8), television (Q.9)), generally received lower ratings for both importance and mastery by both students and employers. This is due in part to the larger number of assembly jobs held (12) compared to Radio-TV jobs (2). (Table 3, 4 & 5)

TABLE 1

ELECTRONICS FOLLOW-UP SURVEY INFORMATION - STUDENTS

Total first student mailing	480
- Results of telephone follow-up (All who had numbers listed were called. Numbers were obtained from registration files.)	
A. Moved - no contact possible	19
B. Called but could not reach.[1]	100
C. Wrong number/no correct number available.[2]	39
D. Disconnected/no new number.[3]	20
E. Student stated questionnaire not applicable	7
F. Student unwilling to respond.	11
G. Student contacted/would mail questionnaire/did not.	69
Total contacted & mailed second questionnaire.	265
Students unable to trace (37%)	-178
Total students contacted and/or responded. (302/480=63%)	302
Students contacted by mail and telephone, but with no response. (236/302 = 78%)	236
Total usable student response (66/480 = 14%)	66
Students disapproving employer contact	29
Total employer contacts (37/60 = 56%)	37

Notes: 1 - Five visitations were made: all were apartments. No one at address.
2 - Five visitations were made: no one at address.
3 - Five visitations were made: no one at address.

TABLE 2

ELECTRONICS FOLLOW-UP SURVEY INFORMATION - EMPLOYERS

Response by mail (27%)	10
Response by telephone (60%)	25
Total responses (95%)	35
Employer not reached	1
Employer not interested	1
Total employers surveyed	37

TABLE 3

SUMMARY OF STUDENT FOLLOW-UP RESPONSES

Total Respondents: 66

1. Received: Certificate 8 (12%); Associate Degree 6 (9%)
2. Job Status: Working Full time 51 (77%); Part-time 4 (6%); Not working 11 (16.7%)
3. Type of Job: Electronics 31 (47%); Electronic related 25 (38%); Unrelated 10 (15%)
4. If job is Electronics related: Assembly 12 (18%); Radio-TV 2 (3%); Other 41 (62%)
5. Monthly Salary (Fully Employed):

0-$400	3	$700-800	2
400-500	3	800-900	0
500-600	3	900-1000	2
600-700	2	+ 1000	36
		Total:	51

TABLE 4 STUDENT TALLY

STUDENT ELECTRONIC TECHNOLOGY QUESTIONNAIRE

Student Accountability Model

March 1976

Total Responses	ACTIVITIES PERFORMED	SHOULD How important is the listed activity to your job? Low 1	2	3	4	5	High 6	IS How well was the listed activity mastered in our courses? Low 1	2	3	4	5	High 6
	EXAMPLE: Understanding of AC-DC Theory Network Systems CIRCLE ONE	1	2	3	4	5	[✓ 6]	1	[✓ 2]	3	4	5	6
31	1. Understanding Electronic principles-inductance, capacitance, semiconductors, rectifiers, amplifiers. (100/E123)	5	3	2	5	3	13	1	5	4	8	8	5
33	2. Application of Biasing, small signal analysis and frequency response; power amplifiers; oscillators; modulation; system concepts. (125/E101)	10	4	3	5	3	8	3	3	5	8	6	2
31	3. Number systems; arithmetic and memory elements; counters; input/output basic logic circuits. (104/E161A)	11	2	2	7	3	6	2	3	9	5	4	3
29	4. Application of microwave propagation and measurement for communications, missels and radar systems. (163/E108)	18	3	0	2	1	5	6	3	3	4	3	1
30	5. Fabrication and assembly use of hand and machine operations. (E110)	8	3	4	7	4	4	4	2	3	4	4	3
31	6. Radio and TV servicing and troubleshooting. (E112)	18	3	0	6	1	3	6	3	2	5	3	2
35	7. Knowledge of Electronic math including use of slide rule and calculators. (E120)	11	3	4	2	7	8	4	0	7	3	7	8
27	8. Understanding of principles of radio receiver-transmitter theory and evaluation for FCC license. (E124)	13	7	1	3	0	3	5	0	5	5	3	1
28	9. Understanding television circuits, video signals, antenna systems, repair; customer relations. (E152)	16	5	3	2	0	2	6	5	2	5	1	1
31	10. Linear integrated circuits; op-amps, diff-amps; regulators. (161B)	12	4	2	1	5	7	3	3	5	4	1	3
30	11. Making precision measurements including error analysis; use of measuring instruments. (E162)	14	2	1	1	4	8	3	2	5	2	4	2
28	12. Introduction to computers and micro processors. (175)	13	4	4	1	3	3	5	1	5	5	1	2

LASER TECHNOLOGY (A Specialty)

Please rate the courses you did take.

		Very Useful	Medium Use	Little Use
6	13. Knowledge of laser principles including such types as Ruby and 1/AG; glass fabrication techniques. (L100)	2	1	3
6	14. Knowledge of Laser optics (L101)	2	0	4
5	15. Knowledge of and operation of pulsed and CW laser equipment. (L102)	1	0	4
6	16. Making laser measurements using spectrometers, monochromometer, spectrophotometers, spectrum analyzers. (L111)	2	0	4
6	17. Knowledge of behavior of gases, pressure measurement, gas type vacuum pumps, vacuum evaporation techniques.	2	0	4

TABLE 4 (Continued)

VACUUM TECHNOLOGY (A Specialty)

TR					
12	18.	Application of physics, chemistry and math to vacuum processes; vacuum device fabrication (V165)	6	2	4
12	19.	Understanding of vacuum systems as applied to metalizing, freeze drying, etc. (V166)	6	2	4
11	20.	Understanding and application of thin film techniques, including process used in film deposition. (V167)	6	1	4

21. In what areas should training be expanded? Digital Circuits 11 ; Analog 6

Radio & TV Repair 1 ; Electronic Assembly 5 ; Use of test equipment 18

22. List activities considered important but not indicated above. (Single comments)

Lab equipment relative to thin film technology and hands on use training needed.

Interfacing with industry (field trips and guest speakers)

As part of technology courses - equipment manufacturers are good source of input that is current.

More emphasis on better quality instruction

Computer technology

- a. Data Processing
- b. Computer programming
- c. Data gathering, i.e., use of various sensors and interfacing with computer processors

Keeping vacuum systems clear

Basic information needed:

- a. Welding for vacuum systems
- b. Assembly of different types of vacuum systems
- c. More gas analyses and metalurgy
- d. Semiconductor metalization
- e. Electron beam operation and characteristics
- f. Understanding substrate req current
- g. Lab course on the implementation of Boolean Algebra using digital integrated circuits

Satellite related theory (Cryogenics, etc.)

Communication circuits and equipment

Working with a large high volume machine shop

TABLE 5 EMPLOYERS TALLY

EMPLOYER ELECTRONIC TECHNOLOGY QUESTIONNAIRE

Student Accountability Model March 1976

Name of Company ______________________________

Address ______________________________

City ______________________ Phone ______________________

Number of employees in Electronic related technology entry level positions __________.

Total Responses		ACTIVITIES PERFORMED	SHOULD How important is the listed activity for required job performance?						IS How well prepared was the ex-student to perform the listed activity?					
			Low					High	Low					High
		EXAMPLE: Understanding of AC-DC Theory Network Systems CIRCLE ONE	1	2	3	4	5	[✓ 6]	1	[✓ 2]	3	4	5	6
26	1.	Understanding Electronic principles-inductance, capacitance, semiconductors, rectifiers, amplifiers. (100/E123)	1	5	4	6	6	4	0	1	4	3	10	2
23	2.	Application of Biasing, small signal analysis and frequency response; power amplifiers; oscillators; modulation; system concepts. (125/E101)	6	2	7	1	5	2	4	2	2	5	3	6
20	3.	Number systems; arithmetic and memory elements; counters; input/output basic logic circuits. (104/E161A)	3	2	6	3	4	2	2	1	5	1	2	6
21	4.	Application of microwave propagation and measurement for communications, missels and radar systems. (163/E108)	2	1	4	4	6	4	5	0	2	2	1	3
25	5.	Fabrication and assembly use of hand and machine operations. (E110)	2	1	5	8	4	5	2	2	1	4	4	5
17	6.	Radio and TV servicing and troubleshooting. (E112)	9	2	1	2	2	1	3	1	3	1	4	1
20	7.	Knowledge of Electronic math including use of slide rule and calculators. (E120)	2	5	3	1	7	2	1	2	4	4	6	2
17	8.	Understanding of principles of radio receiver-transmitter theory and evaluation for FCC license. (E124)	8	1	3	2	2	1	4	1	3	1	0	2
20	9.	Understanding television circuits, video signals, antenna systems, repair; customer relations. (E152)	11	1	2	2	2	2	5	1	5	2	2	2
19	10.	Linear integrated circuits; op-amps, diff-amps; regulators. (161B)	7	1	4	2	3	2	5	1	2	3	2	2
22	11.	Making precision measurements including error analysis; use of measuring instruments. (E162)	6	3	1	4	4	4	3	2	2	3	3	2
17	12.	Introduction to computers and micro processors. (175)	6	0	5	2	2	2	5	1	0	1	3	0

13. In what areas should training be expanded? Digital Circuits _____; Analog _____; Radio & TV Repair _____; Electronic Assembly _____; Use of test equipment _____ See next page

14. List activities considered important but not indicated above.

1. Sales of electrical parts. Programing; (a) Circuit trouble
2. shooting (b) ability to partition computer systems to locate faults
3. Vacuum Systems - thin film techniques. Principals of business - the problems facing business and how employees help solve these problems (or create them)

TABLE 5 (Continued)

13. In what areas should training be expanded?

Digital Circuits: - Use of test equipment

Digital Analog - Use of analog test equipment

Electronic Assembly - Use of test equipment

EMPLOYER ELECTRONIC TECHNOLOGY QUESTIONNAIRE

Student Accountability Model

March 1976

Name of Company ____

Address ____

City ______________________ Phone ______________________

Number of employees in Electronic related technology entry level positions ____________.

ACTIVITIES PERFORMED	SHOULD How important is the listed activity for required job performance?	IS How well prepared was the ex-student to perform the listed activity?
EXAMPLE: Understanding of AC-DC Theory Network Systems CIRCLE ONE	Low High 1 / 2 / 3 / 4 / 5 / [✓ 6]	Low High 1 / [✓ 2] / 3 / 4 / 5 / 6
1. Understanding Electronic principles-inductance, capacitance, semiconductors, rectifiers, amplifiers. (100/E123)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
2. Application of Biasing, small signal analysis and frequency response; power amplifiers; oscillators; modulation; system concepts. (125/E101)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
3. Number systems; arithmetic and memory elements; counters; input/output basic logic circuits. (104/E161A)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
4. Application of microwave propagation and measurement for communications, missels and radar systems. (163/E108)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
5. Fabrication and assembly use of hand and machine operations. (E110)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
6. Radio and TV servicing and troubleshooting. (E112)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
7. Knowledge of Electronic math including use of slide rule and calculators.(E120)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
8. Understanding of principles of radio receiver-transmitter theory and evaluation for FCC license. (E124)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
9. Understanding television circuits, video signals, antenna systems, repair; customer relations. (E152)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
10. Linear integrated circuits; op-amps, diff-amps; regulators. (161B)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
11. Making precision measurements including error analysis; use of measuring instruments. (E162)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
12. Introduction to computers and micro processors. (175)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6

13. [illegible] what areas should training be expanded? Digital Circuits _____; Analog _____;
[illegible]adio & TV Repair ____; Electronic Assembly ____; Use of test equipment _____

14. List activities considered important but not indicated above.

1. ____
2. ____
3. ____

STUDENT ELECTRONIC TECHNOLOGY QUESTIONNAIRE

Student Accountability Model

March 1976

ACTIVITIES PERFORMED	SHOULD How important is the listed activity to your job?	IS How well was the listed activity mastered in our courses?
EXAMPLE:	Low High	Low High
Understanding of AC-DC Theory Network Systems CIRCLE ONE	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
1. Understanding Electronic principles - inductance, capacitance, semiconductors, rectifiers, amplifiers. (100/E123)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
2. Application of Biasing, small signal analysis and frequency response; power amplifiers; oscillators; modulation; system concepts. (125/E101)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
3. Number systems; arithmetic and memory elements; counters; input/output basic logic circuits (104/E161A)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
4. Application of microwave propagation and measurement for communications, missiles and radar systems (163/E108)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
5. Fabrication and assembly use of hand and machine operations. (E110)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
6. Radio and TV servicing and trouble-shooting. (E112)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
7. Knowledge of Electronic math including use of slide rule and calculators. (E120)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
8. Understanding of principles of radio receiver-transmitter theory and evaluation for FCC license. (E124)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
9. Understanding television circuits, video signals, antenna systems, repair; customer relations. (E152)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
10. Linear integrated circuits; op-amps, diff-amps; regulators. (161B)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
11. Making precision measurements including error analysis; use of measuring instruments. (E162)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6
12. Introduction to computers and micro processors. (175)	1 / 2 / 3 / 4 / 5 / 6	1 / 2 / 3 / 4 / 5 / 6

LASER TECHNOLOGY (A Specialty)

Please rate the courses you did take.	Very Useful	Medium Use	Little Use
13. Knowledge of laser principles including such types as Ruby and a/AG; glass fabrication techniques. (L100)	____	____	____
14. Knowledge of Laser optics (L101)	____	____	____
15. Knowledge of and operation of pulsed and CW laser equipment. (L102)	____	____	____
16. Making laser measurements using spectrometers, monochromometer, spectrophotometers, spectrum analyzers. (L111)	____	____	____
17. Knowledge of behavior of gases, pressure measurement, gas type vacuum pumps, vacuum evaporation techniques.	____	____	____

VACUUM TECHNOLOGY (A Specialty)

	Very Useful	Medium Use	Little Use
18. Application of physics, chemistry and math to vacuum processes; vacuum device fabrication (V165)	____	____	✓
19. Understanding of vacuum systems as applied to metalizing, freeze drying, etc. (V166)	____	____	____
20. Understanding and application of thin film techniques, including process used in film deposition. (V167)	____	____	____

21. In what areas should training be expanded? Digital Circuits ____; Analog ____;

Radio & TV Repair ____; Electronic Assembly ____; Use of test equipment ____

22. List activities considered important but not indicated above.

1. ____________________

2. ____________________

3. ____________________

5. Action

a. Summary of questionnaire findings

Of the students responding (66) 21% (14) either an AA or certificate at SJCC; 83% were working full or part-time; of those working, 85% were in electronics or related occupations. Of those working full time (51) over 74% were earning $1,000 or more per month.

Students rated of highest importance to their jobs such basic courses/training as 100AB - General Electronics, 125A,B,C - Circuits and Systems Analysis, and 120A,B - Electronics Math. Most students agreed that they had learned these basics moderately to excellently in their courses.

Most respondents indicated that extension courses were of low importance to their job. But they indicated that they had learned these course activities moderately well.

Responses grouped themselves bi- and even tri- modally, this suggests a rather wide variety of occupational choices and corresponding differences in prevalence of course content to job demands.

In open-ended responses students emphasized a need for (1) a considerable additional body of basic information and skills, and, (2) additional emphasis on computer technology.

b. Dissemination

Sufficient copies of the completed follow-up report, sections 1-4, were copies for dissemination to all electronics instructors. The copies were forwarded to the chairperson for distribution, review and discussion.

c. Impact on college program

A request was made of the department chairperson for departmental response to the following:

1. Utility of the questionnaire format.
2. Utility of the student and employer responses.
3. Problems/concerns regarding the questionnaire or the follow-up process.
4. Indication of any planned modification or change.

d. General Summary of project

This type of SAM follow-up, with its employer emphasis, tends to confirm student followup information. The low number of employers contacted presents a problem. This may have been due to the imposed constraint to obtain signed student releases before contacting employers.

e. Summary of employer findings

Employer responses correlated very well with student responses. This finding tends to reinforce the importance of the information received.

Employers tended to believe that additional training should be given in sales of electrical parts and in principles of business. This suggests that some former students are finding jobs in parts houses rather than just in assembly and repair.

Employers also emphasized an additional need for student training in computer technology - trouble shooting, maintenance and repair.

6. Recommendations for design of future employer follow-up activities

a. Student awareness to prospective contact and employer followup should be developed prior to the end of the school year in June.

b. Employers tend to not respond by mail alone. The following procedure is recommended:

1. Mail questionnaire with letter indicating that the employer will be contacted within one week by telephone.
2. Plan telephone call or other personal contact within one week.
3. Be persistant with telephone calls - indicate that the telephone interviewer will call again.
4. Print sufficient questionnaires that telephone interviewer can fill in blank copies from employers verbal response.

c. Keep questionnaire to one page.

d. Avoid open end responses.

e. The group of students and employers to be surveyed should be relatively limited. (e.g., day students only)

f. Clarification should be obtained concerning the legal aspects of obtaining student signoffs in order to contact employers.

GSO:sm 6/9/76

ATTACHMENT A

2100 Moorpark Avenue
San Jose, California 95128
(408) 298-2181

SAN JOSE CITY COLLEGE

Dr. Theodore I. Murguia
President

San Jose Community College District
Board of Trustees
John R. Brokenshire
Gael Douglass
Dr. John E. Marlow
Virginia Sandoval
Yancy L. Williams
Otto Roemmich
District Superintendent

March 19, 1976

TO:

FROM: San Jose City College Student Accountability Model,
Dr. Lois A. Callahan, Dean of Instruction: Occupational Education

RE: Follow-up Questionnaire

An important task of San Jose City College is to adequately provide its occupational majors with the skills and experience for the world of work. Evaluation of our programs by former students, such as yourself, can help us determine if we are meeting this continuing goal. All students who completed this program in 1974-75 are being asked to respond.

Attached is an evaluation questionnaire which we would like you to complete. In order to facilitate the return process, a self addressed stamped envelope is enclosed.

We are also asking for your permission to contact your employer with a similar questionnaire to help determine employer opinion of the quality of our program. Please return the questionnaire by Friday, March 26, so the survey can be sent to your employer by Tuesday, March 30. If you have not returned the questionnaire by the weekend of the 29th of March, a student employee will visit you in case you need clarification.

We thank you for answering the questionnaire that will help us improve our programs.

I give permission to have my employer contacted. ______________________________
(Signature)

Company Employed By: ______________________________

Address: ______________________________ City ______________

Direct Supervisors Name ______________________ Work Phone No. __________

Please check:

1. Received certificate _________, or Associate degree _________.
2. Job Status: Working ____; Full-time ____; Part-time ____; No ____
3. If Working, Type of Job: Electronics _____; Electronics Related _____; Unrelated ____
4. If Job is Electronics Related: Assembly _____; Radio-TV _____; Other _____
5. Monthly Salary: $0-$400 ____; $400-$500 ____, $500-$600 ____; $600-$700 ____;
$700-$800 ____, $800-$900 ____; $900-$1,000 ____; Over $1,000 ____

APPENDIX B

TIME LINE - SAM

EMPLOYER FOLLOW-UP

March 17-19	Cossey & Work Experience students. Obtain former student addresses, phone numbers and mail employee questionnaire.
March 25	Determine number of employee returns
March 26-27	Address and mail first group of employers questionnaires.
March 28	Conduct telephone and personal contact of student/employee returning questionnaire
March 29	Complete mailing of employer's questionnaire
March 30 - April 10	Continue telephone contact of students and employers who have not returned questionnaire.
April 10	Begin talley of data from student questionnaire.
April 10-20	Begin talley of data from employer questionnaire.
April 20	Complete all employer and telephone interviews.
May 16	Complete data analysis and preliminary report

APPENDIX C

SAN JOSE CITY COLLEGE
SAM - EMPLOYER FOLLOW-UP
ESTIMATED COST TO CONDUCT

Note: Our big expense was in attempting to obtain written student approval to contact employer. This estimated cost to conduct will assume that student signoffs will not be required.

Develop and type questionnaires	$ 50.00
Office Personnel (typing, mailing, etc.)	100.00
Printing	25.00
Supplies and Postage	60.00
Telephone Interviewer (50 hrs. @$3.00)	150.00
	$385.00

Number of students/employers (est.)

Students	200
Employers	100
	300 Total

Estimated cost per follow-up contact: $385 ÷ $3.00 = $1.28

EMPLOYER FOLLOW-UP

CALIFORNIA COMMUNITY COLLEGES

OCCUPATIONAL STUDENT ACCOUNTABILITY MODEL

SHASTA COLLEGE

Eve-Marie Arce
Field Test Coordinator
June, 1976

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INTRODUCTION

Shasta College is one of four community colleges in California participating in the Employer Follow-Up project, an extension of California Community Colleges Occupational Student Accountability Model (S.A.M.) The Employer Follow-Up Project, sponsored by the Chancellor's Office, California Community Colleges, is coordinated at San Jose Community College District.

The primary objective of the consortium-based study is to develop a tested system for collecting from employers of former students evaluations of the training programs.

Each of the four colleges taking part in this study has developed an individual plan for employer follow-up, initially considering local needs. Field test results from participating colleges will be reviewed in June, 1976 by the forty-six member consortium before being distributed statewide.

PURPOSE OF THE STUDY

The intent of this study was to test alternative methods for gaining information from employers of former students in the evaluation of occupational training. The following objectives were listed as important to local needs:

1. To develop an accurate description of target jobs. Include a description of duties and responsibilities, pay and benefits, and education and experience requirements.
2. Develop job markets for future program completers.
3. Modify the existing educational programs to better conform to current industry requirements.

Colleges were given the option of designing a plan to follow up employers of all occupational education students or to narrow the population of a particular cluster or specific program. Shasta College opted to focus on three occupational areas to obtain specific information related to the local college objectives.

Listed below are the programs and primary reasons for inclusion in this project as stated in the project proposal:

1. Early Childhood Education

   In the Spring 1975 follow-up of students, this program showed a low completion figure compared with the total number of students enrolled in the program. The intent of the employer follow-up for this occupational major was to review program requirements for current job placement.

2. Computer Science/Keypunch Operator

   The data processing industry is undergoing rapid technological changes. The purpose of employer contact for this occupational area was to assess future needs of the industry in order to adapt the training to technological changes.

3. Log Truck Driving

   The purpose of the employer contact in this occupational program was to ascertain the effectiveness of this newly-initiated certificate program.

BACKGROUND

Since 1974, Shasta College has participated in the statewide S.A.M. system, which was developed to measure the effectiveness of California Community Colleges' occupational training program. With the S.A.M. system, the college has the capability of identifying and classifying occupationally educated students. S.A.M. gathers from former students such information as whether they are working in the occupational field for which they prepared, and was the training relative to job requirements. Shasta College sent follow-up questionnaires (Appendix, page 1) to students who had taken at least two substantial classes in a terminating major at the close of spring semester 1975. Findings from the Spring 1975 S.A.M. follow-up of former Shasta College students have been tabulated (Appendix, pages 2 - 5).

The Employer Follow-Up Project extends S.A.M.'s goal of improving occupational training by requesting feedback from actual employers of former Shasta College students.

In this study, the following definitions were used:

1. S.A.M.

   Student Accountability Model measures the effectiveness of California Community Colleges' occupational training programs by providing a system for identification of occupationally educated students and collection of feedback from these students.

2. Employer Follow-Up

   S.A.M. Employer Follow-Up will be a system by which feedback is obtained from employers of former occupational students. This program, in the developmental stage, intends to ask effectiveness of training for actual job and relative training needs for job requirements.

3. Early Childhood Education

   Early Childhood Education, an occupational program at Shasta College, was developed in 1970. There were 124 students in the program in Fall 1975, and 49 in Spring 1975.

4. Computer Science and Keypunch Operator

   Computer Science and Keypunch Operation are two programs at Shasta College that were developed in 1967. During the Fall 1975 semester, there were 33 students in the Computer Science and Keypunch Operation programs. In Spring 1975 there were 42 students in the two programs.

5. Log Truck Driver

   Log Truck Driving classes were first offered in Fall 1975. There were 18 students the first semester.

LIMITATIONS/ASSUMPTIONS

This project was limited by the following constraints:

1. Number of returned S.A.M. follow-up questionnaires from students in the three identified occupational areas.
2. Willingness of employers to participate and complete the questionnaires.
3. Employers' knowledge of information requested.
4. Time allotted for study.

There were several assumptions made in this investigation which provided further direction:

1. Primary purpose of this project in the developmental stages was to identify and evaluate the method in the collection of data instead of putting the information to practical use.
2. This report focuses on the presentation of methods and project definition. It is assumed that the actual success of the total Employer Follow-Up lies at the individual college level where staff and administration will need to understand the mechanics of the total S.A.M. project.

METHOD

Student population from the occupational programs included in this study was identified (Table I). Each student included met the following criteria:

1. Attended Shasta College in Spring 1975, then terminated, having completed at least two significant courses in a terminating major.
2. Returned the occupational student follow-up questionnaire to Shasta College.
3. Indicated on the questionnaire that he/she had initially been employed in a job related to the occupational training program.

Not all students responding to the Spring 1975 follow-up study met the criteria listed above for the Employer Follow-Up Project.

TABLE I

SHASTA COLLEGE STUDENTS INCLUDED IN BOTH S.A.M. & EMPLOYER FOLLOW-UP

Occupational Program	Total Students Identified S.A.M. Follow-Up	Employer Follow-Up N	%
Computer Science/ Keypunch Operator	21	5	24%
Early Childhood Education	6	5	83%
Log Truck Driving	23	7	30%
Total Students:	50	17	34%

Seventeen employers were identified on selected student follow-up questionnaires (Table II). Next, employers' addresses and phone numbers were obtained from the phone directories. All but one employer was located and sent the initial letter requesting cooperation in the study (Appendix, page 6). The preliminary questionnaire was included with the initial letter (Appendix, page 7). The questionnaire listed nine items asking the employer to rate elements of the training effectiveness.

TABLE II

EMPLOYERS INCLUDED IN EMPLOYER FOLLOW-UP STUDY

Employer	Computer Science/ Keypunch	Early Childhood Education	Log Truck Driving	Address & Phone	Contact Person
Bill Schmitt Logging			X	1701 Clear Crk.Rd. Redding, CA 96001 243-3069	Bill Schmitt
Continental Trailways			X	1748 Market Street Redding, CA 96001 241-2331	Mrs. Winslow

TABLE II: EMPLOYERS INCLUDED IN EMPLOYER FOLLOW-UP STUDY (CONTINUED)

Employer	Computer Science/ Keypunch	Early Childhood Education	Log Truck Driving	Address & Phone	Contact Person
Der Kinder Garden Pre School		X		2019 Artesia Blvd. Redondo Beach, CA 90278	
Emmett Baugh Co.			X	1610 West Street Redding, CA 96001 243-1696	Norbert St. Marie
Kiddie Kastle Nursery School		X		2800 La Loma Drive Rancho Cordova, CA 95670 363-2800	Barbara Parsons
Charles C. Meek Lumber Company			X	3048 Market Street Redding, CA 96001 243-0312	
N.T. Enloe Mem. Hospital	X			West 5th and Esplanade Chico, CA 95926 342-1841	Chuck Pagoni
North Valley Pre School		X		2960 Hartnell Ave. Redding, CA 96001 243-6414	Sandy Schlappy
North Sacramento School District		X		700 Dos Rios Blvd. Sacramento, CA 95814 448-6369	Sybil Batty
Pacific Farms			X	P. O. Box 252 Gerber, CA 96035 385-1475	
R. J. Hansen & Associates	X			555 Capitol Mall Sacramento, CA 95814 441-7232	Robert Hansen
Redding Elementary School District (Cypress School)		X		P. O. Box 2418 Redding, CA 96001 243-2332	Bee Currie

TABLE II: EMPLOYERS INCLUDED IN EMPLOYER FOLLOW-UP STUDY (CONTINUED)

Employer	Computer Science/ Keypunch	Early Childhood Education	Log Truck Driving	Address & Phone	Contact Person
Redding Record Searchlight	X			P. O. Box 2397 Redding, CA 96001 243-2424	Bill Darley
Royal Sierra, Inc.			X	Could not locate.	
7-11 Trucking & Gen. Engineer.			X	17713 Redbud Lane Summit City, CA 96089 275-2482	Don Bova
Simpson Lee Paper Company*	X X			P. O. Box 637 Anderson, CA 96007 365-2711	Frank Watters
Totals:	5	5	7		

*Employer of two students.

Phone calls were made to employers to arrange for personal interviews. A summary of employer responses is provided in Table III.

TABLE III

EMPLOYER PARTICIPATION AND CONTACT

Occupational Programs	N	Personal Interview Held	Written Questionnaire Returned	Project Participation*		No Participation	
				N	%	N	%
Computer Science/ Keypunch Operator	5	4	1	5	100%	--	
Early Childhood Education	5	4	-	4	80%	1	20%
Log Truck Driving	6	1	3	4	67%	2	33%
Totals:	16	9	4	13	81%	3	19%

*An employer is considered to have participated in this study if a personal interview was held or written questionnaire returned.

During the interviews with employers, a standardized interview form (Appendix, page 9) was used. After the customary introduction and reference to the initial letter, it was reemphasized that the project was not evaluating the performance of the individual student. A brief description of the overall S.A.M. project was provided. The employer was invited to ask questions about the project. Attention was drawn to the standardized interview form, since notes were taken during the interview. Although an attempt was made to systematically follow the standardized interview form, employers were given the opportunity to elaborate. Preliminary questionnaires were collected at the conclusion of the interview.

Two employers were not willing to participate in interviews, but did agree to complete the questionnaires by mail. Time schedules did not permit interviews with two other employers who did agree to participate. Second letters (Appendix, page 11) with both the preliminary questionnaire and standardized interview form were mailed to these four employers.

Letters of appreciation (Appendix, pages 12 - 13) were sent to employers who participated in the interviews and to those who mailed in the information.

FINDINGS

This first section of findings is based on the data obtained from the **nine** questions asked on the preliminary questionnaire (Appendix, page 7). Numbers of employers responded to each item, and therefore the N shown with each item varies.

Preliminary Questionnaire

Item 1: Employers were asked to identify which of five skills were essential or non-essential to the job. Responses are outlined in Table IV. Responses were tabulated by occupation and for all employers who responded.

TABLE IV

EMPLOYER VIEW OF SKILLS AS ESSENTIAL/NON-ESSENTIAL

Skills	Computer/ Keypunch		Early Child-hood Educa.		Log Truck Driving		Total Responses			
	Essential	Non-Essential	Essential	Non-Essential	Essential	Non-Essential	Essen-tial		Non-Essen-tial	
							N	%	N	%
Technical Knowledge	4	0	1	2	4	0	9	82%	2	18%
Operation of Equipment	3	1	0	3	4	0	7	64%	4	36%
Writing Skills	3	1	3	0	1	3	7	64%	4	36%
Verbal Communication	4	0	3	0	4	0	11	100%	0	--
Interpersonal Employee Relations	4	0	3	0	2	2	9	82%	2	18%

N=11

. Item 2: The second item on the questionnaire asked employers if there were other specific skills essential for the job. Since all employers did not complete this section, those responses that were listed are grouped below under occupational programs.

Program	Skill
Computer Science	Supervisory skills Accounting knowledge "Self-starter" Applications knowledge Directing committees
Keypunch Operator	Experience is critical
Early Childhood Education	Basic teaching skills "Love and understanding of children"
Log Truck Driving	Log truck safety Good public relations

Item 3: Participants responded to item three by rating the effectiveness of the technical training provided by Shasta College. Responses are summarized in Table V.

TABLE V

EMPLOYER RATING
OF TECHNICAL TRAINING

Occupational Programs	Excellent		Good		Acceptable		Below Expectations		Poor	
Computer Science/ Keypunch Operator			1		2					
Early Childhood Education			1		1					
Log Truck Driving	1		2		1					
Totals:	N	%	N	%	N	%	N	%	N	%
	1	11%	4	44%	4	44%	--	--	--	--

N=9

Items 4 - 6: Employers were again asked to review skills and rate the effectiveness of college training in questions four through six. Participants rated the effectiveness of the programs at Shasta College in preparing individuals for pre-employment procedures (i.e., the interview, the application, personal presentation) and in orienting individuals to employment (i.e., work attitude, attendance, cooperation with co-workers and with management). This data is outlined in Table VI (Page 11).

Item 7: Responses to Item 7, in which the employer rated the importance of occupational training in relation to other qualifications in the hiring decision, are presented in Table VII.

TABLE VI

EMPLOYER RATING OF EFFECTIVENESS OF SKILL TRAINING, JOB PREPAREDNESS AND EMPLOYMENT ORIENTATION

Skill Training	EMPLOYER RATINGS BY OCCUPATIONAL PROGRAM																			
	Keypunch/Computer					Early Childhood Education					Log Truck Driving					Totals				
	Excellent	Good	Acceptable	Below Expectations	Poor	Excellent	Good	Acceptable	Below Expectations	Poor	Excellent	Good	Acceptable	Below Expectations	Poor	Excellent	Good	Acceptable	Below Expectations	Poor
•**Skills**																				
Technical Knowledge		1	2									4				0	5	2	0	0
Operation of Equipment			2				1	1			1	2	1			1	3	4	0	0
Writing Skills			1	1			1	1			1	1	2			1	2	4	0	0
Verbal Communication			1	2				1			1	2	1			1	2	3	2	0
Computation Skills		1	2					2				3	1			0	4	5	0	0
Interpersonal Employee Relations			2				1	1			1	2	1			1	3	4	0	0
•**Job Preparedness**	1		1					1	1			3		1		1	3	2	2	0
•**Employment Orientation**		1	2					1	1			2	2			0	3	5	1	0

N=8

TABLE VII

IMPORTANCE OF COLLEGE TRAINING IN RELATION TO OTHER QUALIFICATIONS IN EMPLOYER'S HIRING DECISIONS

Occupational Programs	Very Important	Moderately Important	Of Little Importance	Unimportant
Computer Science/ Keypunch Operator	1	2	1	
Early Childhood Education		2		
Log Truck Driving		2	2	
Totals:	1	6	3	

N=10

The second part of this section on findings deals with information gathered from the standardized interview form (Appendix, page 9). There were nine personal interviews held with employers. Two written questionnaires completed by employers were returned. On some items from the standardized interview form, data collected from interviews is presented separately from the written responses. Written responses are identified with an asterik.

Standardized Questionnaire

The first section of the standardized interview questioned the employer about the position for which the former student was hired. Information collected regarding job title, duties and responsibilities, pay range, benefits and minimum and preferred education and experience is summarized on the following pages (pages 14 - 16). Information derived from each employer is categorized by occupational area, keeping data from respondents together.

Specific employers are not identified, since it is the occupational training program and process for collecting data that is being evaluated instead of a comparison of employment locations.

Job duties and responsibilities have been summarized for the report from the written and oral description provided by the employers.

COMPUTER SCIENCE
KEYPUNCH OPERATOR

Job Title	Duties & Responsibilities	Pay Range	Benefits	Minimum Education/Experience	Education/Experience Desirable/Preferred	Promotion Opportunities Additional Requirements
Computer Operator	Operate NCR Century 50 Computer in accordance with written procedures and instructions. Maintain disc library, some peripheral duties in control clerk and keypunch areas.	$ 679 - 799 mo.	Medical Life Insurance Retirement Plan Sick Leave Vacation	High School	Two years of college, some experience.	
Computer Programmer	Programmer. Writes computer programs, designs systems.	$ 800 - 1400 mo.	Medical Life Insurance Profit Sharing	Two years of college, practical experience at college.		
Keypunch Operator	Keypunch all input; prepare for computer; actual operation of computer.	N/A	Medical Retirement Sick Leave Vacation	Working at company in accounting capacity; college accounting classes.		
Operation Supervisor	Responsible for supervision of data coordination, keypunch operation, computer operation.	$1175 - 1685 mo.	Medical Dental Retirement Savings Vacation Sick Leave	Managerial skills; high school and computer operation skill; varying amount of college education accepted.		
Keypuncher	Keypunch, verify input from source documents; prepare and maintain files of program cards, maintain manuals.	$ 590 - 800 mo.	Medical Dental Retirement Savings Vacation Sick Leave	High school	College; keypunching with business type program; prefer two years of college.	

EARLY CHILDHOOD EDUCATION

Job Title	Duties & Responsibilities	Pay Range	Benefits	Minimum Education/Experience	Education/Experience Desirable/Preferred	Promotion Opportunities Additional Requirements
Teacher, Part-Time	In charge of supervision of children in child care and related duties. Supervises in afternoon session. Substitutes in a.m. class.	$2.20 - 3.00 hr.	None for part-time; 1 week paid vacation after 1 year for full-time.	12 college units as specified in Title 22. It was noted that almost all employees have at least an A.A. degree.	Experience in program as substitute before full responsibility of a class.	Full-time teacher or assistant director if vacancy.
Assistant Teacher I, Substitute	Assists in various group activities under the direction of Teacher I. Assists with meals, room preparation and cleanup, small group instruction and with volunteers.	$3.15 - 4.52 hr. Approximately	Medical Dental Retirement Sick Leave School Holidays	Children's Center Permit.	"Experience is very important."	Full-time or Assistant Teacher II; no additional education.
Teacher	Planning, supervising and implementing program for class; prepare weekly plan; meed individual needs of children; be responsible for records, room arrangement and light housekeeping; attend staff meetings; prepare daily snack; attend conferences.	$3.00 - 4.75 hr.	Medical Vacation	Early Childhood Certificate or equivalent.	Experience helps; personal interview.	Assistant Director (needs to be a vacancy). One year at this preschool.
Instructional Aide	Help children with reading and math K-6; type stories and word lists; make home calls; attend all inservice meetings; supervise playground and in classroom when teacher working with other children; use duplicating machine; make instructional materials; attend school functions involving children.		Medical Dental Retirement School Holidays	8th grade or higher proficiency in math; mature, responsible and able to organize tasks.	"Compassionate" Flexible	Educationally handicapped or Education Mentally Retarded instructional aide; no additional requirements.

LOG TRUCK DRIVING

Job Title	Duties & Responsibilities	Pay Range	Benefits	Minimum Education/ Experience	Education/Experience Desirable/Preferred	Promotion Opportunities Additional Requirements
Truck Driver	Truck driver in log transport; haul own logging equipment; position truck; observe scales while truck is being loaded; responsible for load until delivery to mill.	$4.80 - 5.20 hr. (60 hr. week average)	N/A		High school; experience in log trucking; a year before going out alone.	None
*Truck Driver	Drive truck.	$3.00 - 4.50 hr.	Health Vacation	N/A		"Minimal"

EMPLOYMENT OUTLOOK

Employers contacted were also asked the following questions regarding jobs described on the preceding pages: how many individuals are employed in described position; how many of these employees were hired for new openings in the last two years; and what is the outlook for openings in the next two years. Responses are summarized in Table VIII.

TABLE VIII

EMPLOYMENT OUTLOOK FOR DESCRIBED POSITIONS AS REPORTED BY PARTICIPATING EMPLOYERS

Occupational Programs	Current Number Employed In Position	New Employees Hired in Last Two Years	Outlook For Openings Next Two Years All Programs*	New Openings % Increase
Computer Science/ Keypunch Operator (4 interviews)	15	13	16.5	111%
Early Childhood Education (4 interviews)	33 Part-Time 16 Full-Time	6 Full-Time	2 Full-Time	6%
Log Truck Driving (1 interview)	20 25 Seasonal	12	None	0%

N=12 questionnaires (9 interviewed; 4 written)
*Comments from employers that outlook depends on funding and economic conditions.

Employers were asked for an opinion regarding the occupational training at the college. This open-ended question was categorized into four areas in Table IX.

TABLE IX

MAJOR STRENGTHS OF OCCUPATIONAL TRAINING AS SEEN BY PARTICIPATING EMPLOYERS

Response Categories	Occupational Programs			
	Computer/ Keypunch	Early Childhood Education	Log Truck Driving	Totals
Field Work Experience	2	2		4
Technical/Theorical	1	1	2	4
Availability of Training	1			1
Employer Could Not Answer Since Unaware of College Programs	1	1		2

N=11

Employers were also asked what they believed to be the greatest need for improvement in the occupational training provided by Shasta College. Responses fell into six areas listed in Table X. Employers, in most cases, described more than one area for improvement. Table X also includes comments not classified.

TABLE X

GREATEST NEED FOR IMPROVEMENT IN OCCUPATIONAL TRAINING AS SEEN BY PARTICIPATING EMPLOYERS

Response Categories	Occupational Programs		
	Computer Science	Early Childhood Education	Log Truck Driving
More Varied Practical Experience	2	1	
More Intensive Training Skills and Theory	2	2	
Acquaint Student With Self-Development Needs (i.e., flexibility, self-expression, social interaction, professional appearance, job preparedness, public relations)	1	2	1
Employer Couldn't Answer Since Unaware of College Program	2		
Comments:	• Don't graduate student for non-existent jobs • Keep college courses up to technological changes	• Individualized Teaching • Discipline Techniques • Know more about private child care • More specific course content	• Traffic Safety

Comments derived from asking the question "What are the most significant proposed changes in this occupational field?" and "Describe how job skills and educational requirements will change in the next five years and affect current and proposed positions?" are listed below.

Occupational Programs	Employer Comments On Proposed Changes In Occupational Field*	Employer Comments on Proposed Changes in Job Skill And Educational Requirements*
Computer Science/ Keypunch Operator	• Fast-growing field. • Technological changes. (2) • Advent of micro computer. • More complex/larger machines. • Change from "batch processing to data base processing." • Demand for personnel has leveled off. • Combining computer science with all disciplines. How can computer be used as everyday practical aide.	• Keep up with & know new technology. (3) • Need "Super Operators" to supervise complex machines. • Shouldn't have too much experience in batch processing & outdated equipment. (2) • Stress mini computers, Cobol, applications design (especially in data base environments).
Early Childhood Education	• Concern about poor articulation between community colleges & 4-year colleges. • Concern that 4-year graduate will replace 2-year in child care teacher positions. "Differential staffing should be maintained." • Increase state education requirements. • Competition between private & public child care. • State & federal government increasing number of publicly-supported centers. • Individualized teaching. • Community becoming more aware of need to take stand for quality child care.	• Educational requirements increased (Children's Center & Title 22 proposed changes) (4) • Increased need for specialization in child development (preschool teachers & college instructors). • Courses should stress training in individualized teaching.
Log Truck Driving	• It will be increasingly necessary to haul loads further. May be interstate. • More technical.	

*Number following comment indicates more than one employer responded.

ANALYSIS OF FINDINGS

Restatement of Problem

The primary purpose of this project was to explore a method for gathering information from employers as a means of evaluating the effectiveness of occupational training programs.

Effectiveness of Method

Selection of the student population using the criteria listed on page four proved to be an effective employer identification procedure. Colleges, of course, would need to have instituted the S.A.M. system in order to use this selection criteria. The initial returns from the S.A.M. follow-up plan may provide an insufficient sample of target jobs for employer follow-up, but use of the S.A.M. system should provide an adequate number after two years in most active occupational programs.

Shasta College drew its population for the study from three occupational areas. Of these seventeen students identified from the returned follow-up questionnaires, sixteen employers were contacted and fifteen verified employment of former students.

Five days were needed for initial phone calls to arrange for interviews. Nine employers agreed to personal interviews. One employer refused to participate, saying it was doubtful whether the company could be of any help, especially since the student was employed by the company prior to enrollment in the occupational program. Two participants said they could not agree to an interview, but would complete the forms if mailed to them. Two other employers were mailed second letters and questionnaires, since contact could not be made. It should be noted that eight of the nine employers consenting to personal interviews were in Computer Science and Early Childhood Education.

Supervisors in both these fields could be considered to have "desk jobs" and therefore could schedule appointments more easily. There was only one trucking firm that consented to an interview. Follow-up coordinators need to consider the type of occupation in deciding to hold personal interviews or to obtain data through the mail.

The general response of employers contacted by phone and personal interview was positive. Upon initial contact, several employers expressed concern about responding, since they did not feel sufficiently familiar with the college program to evaluate it. Most employers said that their responses could only be based on the performance of the former students.

The S.A.M. consortium meeting report, December 1975, mentioned difficulty in getting meaningful responses from employers as an important reason why employer follow-up was not pursued. A field-tested, standardized interview form should alleviate this problem. The question also arises whether the project should use a college staff member or an outside interviewer. Again, the employment of a standardized interview form eliminates the need for either of the above. Interviews are time requiring; hiring of an outside interviewer or using staff members could make employer follow-up financially impossible. There are two good resources available in work experience students majoring in the occupational area being investigated as part of their work experience requirement, and student workers and work-study students needing positions. These students, already having training and knowledge in the field, would need only orientation to interview methods and to the project. This might also provide these students with a realistic look at their career choice.

Perceptions of community college occupational training programs were generally favorable among those interviewed. Some of the positive comments included the following:

"Think alot of program out there . . . impressed with attitude that others have for courses."

"Judging program by former student . . . satisfied."

"Two-year colleges are doing a terrific job - everyone agrees."

"We want to give more input to programs."

"Keep up the good work."

Responses received from participating employers varied with the employers' awareness of community colleges, their occupational field, available time and position.

Review of Instruments

There were three standard forms used in this project: S.A.M. Follow-Up Questionnaire (Appendix, page 1); preliminary questionnaire (Appendix, page 7); and standardized interview of employers (Appendix, page 9).

The follow-up questionnaire asked the former students to answer items for the S.A.M. project. Additional items were required for the employer follow-up study. There were: employers' addresses; name and title of supervisors or contact persons; and student's current job title.

Although it is important to keep the preliminary questionnaire short, there are additional questions that could be added. Since information obtained from question two of the preliminary questionnaire can't be categorized, question two should be changed to a checklist of other specific and non-skill requirements. Some identified by employers interviewed in this study included:

1. Experience
2. Supervisory skills
3. Personal presentation
4. Mathematical skills
5. Initiative

Question three yielded little usable data, and therefore should be eliminated.

Whichever skills and non-skill requirements are added to question two should be listed for rating in question four on a revised questionnaire.

Since employers were asked in question seven to check the importance of college training in relation to other qualifications, the employer might also be asked to list the other qualifications and minimum requirements for the position.

An explanation is required to clarify the the Yes/No responses in question eight.

Items A - G on the standardized interview form ask for factual information which requires at least twenty minutes to answer during a standardized interview. In some cases, employers needed to look up the information. It would seem to be a more efficient use of time to ask items A - G on the preliminary questionnaire. Many of these positions have written job descriptions which could be provided. Also, at this time additional job descriptions of related or proposed jobs could be requested.

The interviewer should still have the employer verify the exact job title at the time of the personal interview. On Interview Item G, the employer should be questioned about the total number of new employees hired in the last two years.

The open-ended questions in Part II, Employer Opinion, allowed for a more detailed, complete discussion of the work situation and came at a time during the interview when the employer was more fully informed and relaxed. The responses to the questions were therefore more fruitful in understanding the work situation.

The preceding section describes modification to instruments. Overall, data collected could be tabulated and quantified for statewide comparison.

Staffing Review

A cost time analysis for this developmental employer follow-up project is estimated below:

TASK	HOURS
1. Proposal	6
2. Instrument Development	24
3. Phone Calls	10
4. Interviews	18
5. Follow-Up Letters	10
6. Travel	18
7. Clerical	24
8. Report	80
Total Hours:	190

ACTION

This report is being submitted for review in June with the three other studies on Employer Follow-Up.

Since there is specific data that would be of interest to the three occupational areas being investigated, reports will also be made available to college staff. It is also believed that the advisory committees of these occupational programs will be asked to review the findings and to make recommendations and comments regarding the report.

RECOMMENDATIONS FOR DESIGN OF FUTURE EMPLOYER FOLLOW-UP

Five recommendations are offered, based on findings of this study, for design of future employer follow-up studies:

1. It is recommended that changes suggested in the section Reviewing the Instruments be considered for incorporation into future follow-up questionnaires.

2. It is recommended that personal interviews be held with employers when possible, since more relevant information is gathered than through mailed questionnaires.

3. It is recommended that project directors employ those college work-study students and student workers majoring in the occupational programs being evaluated. If there are no funds available to employ interviewers, students taking work experience might conduct interviews, using the standardized interview form, as part of their work experience course assignment. These students, it is believed, have identified a specific interest in the occupational training program, and would be enthusiastic about gathering exact employer information regarding their career selection. An additional component could have these students interview the former students.

4. It is recommended that initial personal interviews be conducted by other than college staff, and that staff follow up with additional interviews when the program could benefit from more specific questioning of the employer and when time allows.

5. It is recommended that priority for employer follow-up studies be given to those occupational programs which: a) have a low student employment placement; b) are newly initiated; or c) are undergoing rapid technical change.

6. It is recommended that individual departments or divisions utilize the available employer follow-up models as a guide in evaluating individual programs when a large scale project is not warranted due to lack of funds or limited student follow-up population.

SUMMARY

This report defines a method for evaluating the effectiveness occupational training programs through employer follow-up. Findings outlined for Shasta College need to be reviewed by departmental staff before exact impact on college programs can be projected. The conclusion is that data required for evaluation can be obtained from employers of former students to aid in improving occupational training at community colleges.

APPENDIX

A-1

S.A.M. FOLLOW-UP
STUDENT QUESTIONNAIRE

Name ____________________ Present Address ____________________

Telephone Number ____________________ Social Security Number ____________________

What was your first job after leaving Shasta College? ____________________

Who was your first employer? ____________________

PLEASE ANSWER THE FOLLOWING QUESTIONS RELATING TO YOUR PRESENT JOB.

What is your present job? ____________________

Who is your present employer? ____________________

Do you work full time? __________ Or part time? __________

Do you work day shift? ______ Swing shift? ______ Graveyard? ______ Other? ______

How many hours per week do you work? ____________________

What is your hourly rate of pay? __________ What is your monthly rate of pay? __________

How long have you held this job? ____________________

How has your college training helped you in your present job: to get the job? __________

to earn a promotion? __________ other? ____________________

(please explain)

Were you given help by the Placement Office or the instructional staff of the college in seeking your first job?

Yes ______ No ______ Please explain. ____________________

Are you satisfied with your present employment?

Yes ______ No ______ Please explain. ____________________

We would like to have you rate various aspects of your college experience as it relates to your present work. (Please check the appropriate column.)

	Excellent	Good	Acceptable	Poor
a. College instructional program				
b. Training facilities & equipment				
c. College work experience program				
d. College counseling services				

Which course or courses taken while in college have been most helpful to you in your work? Explain. ____________________

What additional training or skills would have been most useful for you to develop? Explain.

____

Comments: Please provide any information about yourself, or the college, which you feel would be helpful to us in improving our occupational programs. ____________________

SEMESTER Spring 1975

Instructional Division: Business Education

Instructional Program: Computer Science (320)

14020300 U.S.O.E. Code

________ C.I.D. Code

Questionnaires Mailed: 14

Students Contacted: 12

Questionnaires Returned: 9(75%)

	Initially Employed In a Related Job	Continued Employment In a Related Job	Promoted In a Related Job	Employed In an Unrelated Job	Attending Another College	Unemployed By Choice	Unemployed And Seeking Employment	
1. Preemployment Objective	2							22%
2. College Transfer Objective	2			1	3			67%
3. In-Service Training Objective		1						11%
4. High School Diploma Objective								
5. General Education Objective								
	44%	11%		11%	34%			

Student Program Ratings:

	Excellent	Good	Acceptable	Poor
College instructional program				
Training facilities and equipment				
College work experience program				
College counseling services				

	Salary Range Jobs Related to Occupational Major	
	Low	High
Hr:	$2.56	$4.25
Mo:	$450	$1000

Summary Comments: Although this program is described as an occupational program, 6 of the 9 students returning questionnaires (67%) indicated that they either were or intended to take further training at a four-year college; however, 5 of the 9 students contacted (55%) were working at computer-related jobs.

SEMESTER Spring 1975

Instructional Division: Business Education
Instructional Program: Keypunch Operator (634)
14020201 U.S.O.E. Code
________ C.I.D. Code

Questionnaires Mailed: 10
Students Contacted: 9
Questionnaires Returned: 2(22%)

	Initially Employed In a Related Job	Continued Employment In a Related Job	Promoted In a Related Job	Employed In an Unrelated Job	Attending Another College	Unemployed By Choice	Unemployed And Seeking Employment	
1. Preemployment Objective	1							50%
2. College Transfer Objective								
3. In-Service Training Objective								
4. High School Diploma Objective								
5. General Education Objective				1				50%
	50%			50%				

Student Program Ratings:

	Excellent	Good	Acceptable	Poor
College instructional program				
Training facilities and equipment				
College work experience program				
College counseling services				

Salary Range Jobs Related to Occupational Major	Low	High
Hr:		
Mo:	$	$525

Summary Comments: A very low return rate was experienced in this certificate program (22%). The primary difficulty in surveying this occupational program was the fact that most students did not see their enrollment in the course as a specific occupational program but as an adjunct to a secretarial or computer science specialization.

A-4

SEMESTER Spring 1975

Instructional Division: Applied Sciences

Instructional Program: Early Childhood Education (416)

09010200 U.S.O.E. Code

__________ C.I.D. Code

Questionnaires Mailed: 6

Students Contacted: 6

Questionnaires Returned: 6 (100%)

	Initially Employed In a Related Job	Continued Employment In a Related Job	Promoted In a Related Job	Employed In an Unrelated Job	Attending Another College	Unemployed By Choice	Unemployed And Seeking Employment	
1. Preemployment Objective	5					1		100%
2. College Transfer Objective								
3. In-Service Training Objective								
4. High School Diploma Objective								
5. General Education Objective								
	83%					7%		

Student Program Ratings:

	Excellent	Good	Acceptable	Poor
College instructional program				
Training facilities and equipment				
College work experience program				
College counseling services				

	Salary Range Jobs Related to Occupational Major	
	Low	High
Hr :	$2.00	$3.00
Mo :	#325	$480

Summary Comments: Six students were identified who left the College after completing courses in Early Childhood Education. All the students returned the questionnaire. Five of the six students were employed in a job related to their college training. The remaining student was a housewife who was not seeking work outside the home.

SEMESTER Spring 1975

Instructional Division: Trade/Industrial Education

Instructional Program: Log Truck Driving (656)

17990000 U.S.O.E. Code

_________ C.I.D. Code

Questionnaires Mailed: 26

Students Contacted: 23

Questionnaires Returned: 13(57%)

	Initially Employed In a Related Job	Continued Employment In a Related Job	Promoted In a Related Job	Employed In an Unrelated Job	Attending Another College	Unemployed By Choice	Unemployed And Seeking Employment	
1. Preemployment Objective	7			1	1		2	85%
2. College Transfer Objective								
3. In-Service Training Objective								
4. High School Diploma Objective								
5. General Education Objective				2				15%
	54%			23%	8%		15%	

Student Program Ratings:

	Excellent	Good	Acceptable	Poor
College instructional program		X		
Training facilities and equipment	X			
College work experience program		X		
College counseling services		X		

	Salary Range Jobs Related to Occupational Major	
	Low	High
Hr	$3.00	$6.88
Mo	$480	$1100

Summary Comments: Thirteen of the 23 students completing the log truck driving course and leaving the College in the spring of 1975 were contacted. Only 2 of the 13 were unemployed and seeking employment as a log truck driver. Seven of those contacted (54%) were initially employed as truck drivers, but not all were employed specifically as log truck drivers. All elements of the program received high ratings by students.

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Shasta College

DALE A. MILLER
District Superintendent President

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Project S.A.M.
Student Accountability Model
Re: ____________________

Dear Colleague:

Shasta College is working to improve its occupational training program. You can help us greatly in this effort.

According to our records, the former Shasta College student named above is currently employed by your organization. This project is not evaluating the individual performance of this student, but we are, instead, concerned about how effectively our training program prepares all students for employment.

To assist us in evaluating the effectiveness of our program, would you agree to a short interview with a representative from the college during the month of April? You will be contacted by phone to arrange an interview date. Enclosed please find a preliminary questionnaire we ask that you complete. This questionnaire will assist us in evaluating our occupational programs.

Your cooperation will go far to help us make our programs more effective.

Sincerely,

Leo Chiantelli
Associate Dean of Student
Assistant Services

cr
Enclosure

SHASTA TEHAMA TRINITY JOINT COMMUNITY COLLEGE DISTRICT
1065 NORTH OLD OREGON TRAIL • REDDING, CALIFORNIA 96001 • TELEPHONE (916) 241 3523

Employee________________

Date________________

SHASTA COLLEGE
PROJECT S.A.M.
STUDENT ACCOUNTABILITY MODEL
EMPLOYER FOLLOW-UP

Preliminary Questionnaire

Please complete this questionnaire, keeping in mind that we are not evaluating the individual performance of your employee, but we are concerned about how effectively our training program prepares all students for employment. Check only one response for each question. A college representative will pick up this questionnaire at the time of the interview.

1. Please identify which of the following are essential or non-essential to this job in your organization:

	Essential	Non-Essential
a. Technical Knowledge	___	___
b. Operation of Equipment	___	___
c. Writing Skills	___	___
d. Verbal Communication	___	___
e. Interpersonal Employee Relations	___	___

2. Are there other specific skills essential for the job? Yes______ No______

If yes is checked, please list:
a. ________________________
b. ________________________
c. ________________________
d. ________________________

	Excellent	Good	Acceptable	Below Expectations	Poor
3. How would you rate the overall effectiveness of the technical training provided by our college?					

Employer________________

Interviewer______________

Date____________________

Time________to__________

SHASTA COLLEGE
S.A.M. EMPLOYER FOLLOW-UP
STANDARDIZED INTERVIEW OF EMPLOYER

Job Positions

A. According to my information, ________________________________

has listed his/her job title as ________________________________

B. Could you describe or provide the duties and responsibilities of this position:

____

____

____

C. What is the pay range:____

D. What are the benefits:____

E. Minimum educational and experience requirements are:_______________

____

____

F. Opportunities and requirements for promotion for individuals in this position are:____

____

____

G. How many are employed in this position:_________________________

Number employed in the last two years:__________________________

Outlook for new openings in the next two years:___________________

H. What other related positions/jobs are available in your organization:

____

____

____

____

____

(This section will be followed up with a written request for duties/responsibilities; pay range; benefits; and education/experience.)

Preliminary Interview (Continued)

	Excellent	Good	Acceptable	Below Expectations	Poor
4. How would you rate the effectiveness of our college training for each of these:	____	____	____	____	____
a. Technical Knowledge	____	____	____	____	____
b. Operation of Equipment	____	____	____	____	____
c. Writing Skills	____	____	____	____	____
d. Verbal Communication	____	____	____	____	____
e. Computation Skills	____	____	____	____	____
f. Interpersonal Employee Relations	____	____	____	____	____
5. How would you rate the effectiveness of our programs in preparing individuals for pre-employment procedures? (i.e., the interview, the application, personal presentation)	____	____	____	____	____
6. How would you rate the effectiveness of our programs in orienting individuals to employment? (i.e., work attitude, attendance, cooperation with co-workers and with management)	____	____	____	____	____

	Very Important	Moderately Important	Of Little Importance	Unimportant
7. How important is college occupational training in relation to other qualifications you consider in making the hiring decision?	____	____	____	____

8. Would you hire one of our graduates for a future job in your organization? Yes______ No______

9. Would you like a copy of the completed survey? Yes______ No______

S.A.M. EMPLOYER FOLLOW-UP
RATED QUESTIONS

II. Employer Opinion

A. What, in your opinion, is the major strength of the occupational training provided by Shasta College?

____

____

____

B. What, in your opinion, is the greatest need for improvement in the occupational training provided by Shasta College?

____

____

____

C. What are the most significant proposed changes in this occupational field?

____

____

____

D. Describe how job skills and educational requirements will change in the next five years and affect current and proposed positions?

____

____

____

____

E. What additional comments or suggestions do you have for Shasta College's occupational training programs?

____

____

____

A-11

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Shasta College

DALE A. MILLER
District Superintendent-President

FOUNDED 1948

Project S.A.M.
Student Accountability Model
Re:

Dear

Please refer to the previous letter sent to you from Shasta College regarding your assistance in the evaluation of our occupational program. We indicated that you would be contacted by phone to arrange for a personal interview to gather information about the __________ program at the College. We have attempted many times to make these arrangements.

Since the project deadline is approaching, I would like to ask if the person supervising the former Shasta College student named above would be willing to complete the interview form. As indicated before, this project is not evaluating the individual performance of this student, but we are concerned about how effectively our training program prepares all students for employment.

Enclosed please find a copy of the Preliminary Questionnaire which was sent out with the initial letter and a Standardized Interview form. It would be greatly appreciated if both these forms could be completed and returned as soon as possible in the stamped, self-addressed envelope. Your assistance and expertise is certainly needed.

Again, your time is truly appreciated. Thank you for your cooperation.

Sincerely,

SHASTA-TEHAMA-TRINITY JOINT COMMUNITY COLLEGE DISTRICT
1065 NORTH OLD OREGON TRAIL • REDDING, CALIFORNIA 96001 • TELEPHONE (916) 241-3523

A-12

Shasta College

DALE A. MILLER
District Superintendent-President

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Mr. Joseph Redmon, Redding
Mr. Rolland Robinson, Cottonwood

Dear

Please accept a word of appreciation for the time you gave to assist Shasta College in the evaluation of the ______________ program.

The personal interview provided many interesting and informative insights. Your cooperation makes it possible for Shasta College to make our training programs more effective.

Sincerely,

SHASTA-TEHAMA-TRINITY JOINT COMMUNITY COLLEGE DISTRICT
1065 NORTH OLD OREGON TRAIL • REDDING, CALIFORNIA 96001 • TELEPHONE (916) 241-3523

A-13

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Mr. Joseph Redmun, Redding
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Shasta College

DALE A. MILLER
District Superintendent-President

FOUNDED 1948

Dear:

Please accept a word of appreciation for the time you gave to assist Shasta College in the evaluation of the ________ program.

Your cooperation makes it possible for Shasta College to make our training programs more effective.

Sincerely,

SHASTA-TEHAMA-TRINITY JOINT COMMUNITY COLLEGE DISTRICT
1065 NORTH OLD OREGON TRAIL • REDDING, CALIFORNIA 96001 • TELEPHONE (916) 241-3523

Appendix G

SAMPLE COLLEGES SURVEYED FOR EMPLOYER FOLLOW-UP INFORMATION BASE (Stratified by size and geographical representation)

NORTH	SOUTH
American River (Los Rios District) Fresno City (State Center District) Modesto (Yosemite District) City College of San Francisco and Centers (San Francisco District)	Fullerton (North Orange County District) Long Beach City (Long Beach District) Pasadena City (Pasadena Area District)
Merritt College (Peralta District)	Citrus College (Citrus District) Cypress College (North Orange County District) Orange Coast College (Coast Community District) San Diego City College (San Diego District)
Cabrillo College (Cabrillo District)	Grossmont College (Grossmont District) San Diego Mesa (San Diego District)
Consumnes River College (Los Rios District)	San Diego Miramar (San Diego District)

Abstract of Survey Interviews with a Representative Sample of California Community Colleges

Objectives of the interviews were to determine:

1. Experiences of the district/college with employer follow-up.
2. What the district/college needs to know from employers to review and evaluate occupational education programs.

Introduction

During November and December, 1975, project staff interviewed community college personnel to provide the Employer Follow-up Project with an information base of local experiences and attitudes toward employer feedback. Twelve community college districts representing eighteen colleges were contacted.

The sample colleges selected fell into four cells based on size (occupational education enrollment) and included northern and southern California districts in each cell.

Advance contact was made with the district or college chief occupational education administrator to describe the intent of the interview and kinds of information being sought and to suggest other college personnel who might participate in the discussion. Reception was positive and colleges/districts provided excellent information that served as valuable input for the system design and for discussion information by the Employer Follow-up Consortium.

To achieve consistency in data, an instrument was used to guide discussion and record comments. The instrument was structured in two parts consistent with the objectives:

A. Experiences of College/District with Employer Follow-up, and

B. Information Needed from Employers for Program Evaluation and Review.

The district was also asked to identify any persons at the district or college who might contribute to the project and asked specifically if they would be interested in participating in an employer follow-up field test. The following comments summarize district experiences.

A. Experiences of Colleges/Districts with Employer Follow-up

1. Most of the colleges interviewed used no systematic approach to collect, analyze, and disseminate employer perceptions of occupational training programs.

Appendix H continued

2. Reasons given for not using a systematic approach to employer follow-up included: staffing, financial, and time constraints; lack of a system for accomplishing; lack of accurate identification of employers of former students; difficulty of getting meaningful response from employers; not considered to be a high priority activity; developmental stages of related programs/services such as placement and work experience.

3. A variety of techniques, methods, and operations are used to get information from employers for very specific purposes, e.g. placement, CWE student supervision, needs assessment. Formal and/or informal approaches included:
    a) Use of a specially hired and trained interviewer to contact employers.
    b) Use of advisory committees.
    c) Instructor contacts, varying from formal approach with release time provided to more casual and informal.
    d) CWE coordinator visits.
    e) Placement department contacts.
    f) Program coordinator/instructor indepth surveys.
    g) Seminars, forums, job fairs, etc.
    h) Surveys in collaboration with professional or trade organizations, e.g. San Gabriel Valley Dental Society/ tricollege survey regarding dental auxiliary.

4. Colleges have found that employer contacts are generally favorably received. However, getting to the right (most knowledgeable) person to gain valid information is not a simple task. They also believe it is important to show value for the employer of a follow-up system if the reception is to be positive.

5. Colleges expressed concern about the obstacle the "right to privacy" legislation was to their efforts to track students.

6. Contact Method: Mail, telephone, personal call, all have been used to contact employers. Any contact method must be simple, brief, easily administered, and economically feasible. A blend of several methods could conceivably be employed. Quality of response is far more important than numbers of respondents.

    The labor market trained for, too, poses problems because of the mobility of students. Local contacts are generally easier.

    Varying sizes of employer organizations and number and frequency of hirings are also conditions that must be addressed.

7. The contact person (e.g. personnel department, immediate supervisor) is a variable depending on:

    a) Information sought
    b) Company policies
    c) Known facts about the former student, i.e. reporting relationships.

8. Contact timing should be long enough after employment for some demonstration of expertise and yet not so long that college training and on-the-job training are not easily distinguished. Generally this translated into no sooner than three months, and no longer than one year, with six months being a fairly "middle ground" consensus. A single contact (i.e. between three months and one year) was considered sufficient by most districts.

B. Information Needed from Employers for Program Evaluation and Review

Colleges/districts were asked to rate the importance to program evaluation of a variety of information that might be obtained by employers. A three point scale of essential, moderately important, and not essential was used.

Items were grouped into categories: hiring information, personal skills, technical skills, and employment potential. Colleges were also asked about instrument design and format, i.e. selected items and rating scale and/or open-end questions.

1. Input related to the value and quality of Technical training was agreed to as being of greatest importance.

   This should be approached in two ways:

   a) Specific items related to a particular job and a rating scale and a solicitation of open-end responses on program strengths and needs, or program training deficiencies or lacks.
   b) Questions should address skills and not "attitudinal" areas.

2. Questions or items addressing personal skills (work orientation, initiative and responsibility, cooperation) met with varying receptiveness. Some colleges felt it was essential to determine if personal skills were the major deterrant to success, others believed it was not an area which a college had much opportunity to influence and/or change. A majority of colleges favored including one question related to work orientation.

3. Influence of the college training on the employers hiring decision was generally felt to be an appropriate area on which to get feedback. Effectiveness of training in "pre-employment" skills (interview, application, self presentation) drew extreme reactions (very pro and very against). Those that favored employer input in this area felt it would have real impact on program design.

4. Employment potential as a result of college training and whether the college trained employee had better opportunities

4. continued

than the non-trained employee drew mixed reactions. Reasons for these reactions were that these were subjective areas, that input would not directly influence training programs, and that it was an "ego building" question for the college.

5. Although colleges sampled all feel that forecasting and manpower projection information, indications for needed retraining and upgrade programs, and new training or programs the college should become involved with are important inputs from employers, many did not believe this was the right vehicle for getting this information.

6. A general (addressing all occupations) questionnaire although an acceptable starting place - will not have good acceptability or gather specific information needed for program review. It was believed that instruments for clusters and, in some instances, even for specific occupations will eventually need to be developed.

C. Colleges in general believe there is real need for a system of Employer follow-up. Such a system should be implemented locally and should be flexible enough to adapt to varying needs, interest, and programs including support services such as placement that should be linked with the system. Most colleges also indicated their willingness to participate in a field test of a system as long as it didn't require additional personnel, extensive budget, or excessive time from existing staff. Colleges generally indicated they would be very receptive to having their advisory committees react to any preliminary system developments and provide their input for refinement.

D. Additional Comments

1. The need for a signed release from the former student authorizing contact with the employer or other such system to comply with legal right to privacy restrictions was emphasized.

2. Any system, regardless of contact method used, must have computerization capabilities.

3. Personal contact, in some form, was viewed by many colleges as an essential part of the system. This might be introduced prior to mailing an instrument, as an interview approach to getting feedback, or as enrichment to expand information on a mailed return.

Appendix I

PROJECT SAM, EMPLOYER FOLLOW-UP FIELD TEST PROCEDURES

INTRODUCTION

The Employer Follow-up Project objective is to develop a system to collect employer feedback on community college occupational education training programs, as can be noted on the attached sheet defining the objective and some of the conditions to be accommodated. The project is a spinoff from SAM (Student Accountability Model). Field test participation relies heavily on the participating college's progress in implementing overall SAM. Information collected from employers should assist the college in modifying, and/or changing occupational programs. In other words, the system is designed to be program orientated, not personal performance orientated. With these thoughts in mind the following guidelines are defined as a part of the field test procedures.

PLAN

In cooperation with the project coordinator, each field test college will prepare an overall plan of their approach to employer follow-up (See plan outline attached).

The project provides for some financial support for a participating college for the field test. That is why the budget information is essential. Since the field test also is designed to be somewhat experimental in terms of the approaches used, the procedures, and the general system, it is hoped that among the test colleges there will be some variety in the application. The college's plan should first service the needs of the college itself; and second service the needs of the project.

EMPLOYER IDENTIFICATION

To participate in the Employer Follow-up field test, the college must have specific information on the employer including the contact person and the address. The most effective way of collecting this information will have been for the college to already have gathered it through SAM student follow-up.

If the student questionnaire included a question regarding the employer, this will be the easiest way to identify the universe, or the contact list. The "universe" for this project will include only those employers who have employed former students from the college. It also may be very important to have the students permission to contact the employer. A waiver, i.e., a question in the Student Follow-up Questionnaire asking if the student objects to having a contact made with his employer, should alleviate the "right to privacy" concerns.

Colleges which have not identified employers through the student questionnaire will need to utilize other information sources, i.e., placement office or instructor lists, to identify the universe.

The college may wish to follow-up employers of all occupational education students, or may wish to narrow the universe to a particular cluster, or a specific program.

PROJECT SAM, EMPLOYER FOLLOW-UP FIELD TEST PROCEDURES (Continued)

INSTRUMENT

The suggested instrument is a guide only. It was developed from information gathered through a survey of a representative sample of California community colleges, discussions with the project Consortium (which includes community college and industry representatives), and a search of similar projects in and outside the state. There is no known absolute best approach to an employer questionnaire or instrument. The college is encouraged to make changes that can best accommodate its own program review needs. However, it is also hoped that some consistency in categories of information requested from employers will be maintained by all participating colleges. Major changes in the instrument should be discussed with project staff.

APPLICATION OPTIONS

In order to provide information and data about the methodology that is most workable, a variety of application options are suggested. These are suggestions only. The college may wish to identify additional approaches of its own. These approaches should be included in the plan. Application methods should be carefully analyzed and controlled so that there is hard data to support decisions made at the end of the test about which option, or approach, provides the best quality of employer follow-information. Suggested options include:

A. Mail questionnaire only.

B. Prior telephone call to inform the employer that a questionnaire will be mailed.

C. Mail questionnaire with telephone follow-up:

    1. With 100% of the employers responding.
    2. With a sample of employers responding.

D. Mail questionnaire with personal interview follow-up:

    1. With 100% of the employers responding.
    2. With a sample of the employers responding.

E. Telephone interview only.

F. Personal interview only.

G. Other system of choice (to be specified).

TABULATION AND ANALYSIS OF INFORMATION

Since the ultimate objective of the Employer Follow-up Project is to collect information that can assist in program modification, the analysis of responses from employers is of utmost importance. The college's plan should include a description of the approach to tabulation and analysis of survey results and specific information that indicates how program personnel will be provided with feedback from employers.

DATES

It is hoped that the field test will operate over a maximum of a two-month period, and that all data will be in and analyzed by May 15, 1976.

TECHNICAL ASSISTANCE

Technical assistance can be provided to the participating field test colleges by project staff, or through the use of consultants retained to provide a particular expertise. The college may request this in advance as a part of its plan, or, as they progress through the project. If a college experiences a particular problem whose solution is in the best interest of the project, every effort will be made to provide support help to the college.

Project SAM

OBJECTIVE

Develop by July 1, 1976, a system for collecting feedback information from employers of community college occupational education completors.

CONDITIONS

The System must be:

- Compatible with SAM (Student Accountability Model)
- Based on what community college educators need to know to assess, modify, and change programs and on what employers are willing to disclose.
- Guided by a consortium of employers and community college educators.
- Monitored by the SAM Consortium
- Flexible and simple for easy application to individual community college district needs
- Tested and ready for implementation

DESIRED RESULTS

Improved quality of occupational education programs at California community colleges.

INSTRUCTIONS TO PARTICIPATING FIELD TEST COLLEGES

The following information is suggested for inclusion in your college/district plan and report for the Employer Follow-up Field Test. Since the project objective is to develop a system for gaining employer feedback information that can be used to modify and/or change community college occupational education programs, some consistency of data and findings is important to the outcome of the field tests. These should be completed in writing and submitted to the project coordinator.

OUTLINE OF INFORMATION TO BE INCLUDED IN THE FIELD TEST PLAN

1. District Name, Address, and Contact Person (Name, Title, Telephone).
2. Field Test Coordinator(s) (Name, Title, Telephone - if different from contact person).
3. Participating Colleges (Name, Address, Telephone).
4. College Coordinators for Field Test (Name, Address, Telephone - if additional persons involved).
5. Description of Plan
    - a. College Objective
    - b. Method
        - (1). Identification of Employers.
        - (2). Occupational Programs Involved
        - (3). Sampling Techniques (if applicable)
        - (4). Contact Method(s)
    - c. Personnel Assigned
        - (1). Instrument Design
        - (2). Employer Contact Coordination
        - (3). Data Analysis
    - d. Time Schedule
    - e. Budget
    - f. Requirements for Outside Assistance
        - (1). Technical
        - (2). Budgetary
    - g. Description of Data Analysis and Control
        - (1). Tabulation Method (Manual, Machine)
    - h. Dissemination Plans

OUTLINE OF INFORMATION TO BE INCLUDED IN THE FIELD TEST REPORT

1. District and Participating College Identification Information (See #s 1. and 2. above).
2. Method
3. Findings and Results
4. Analysis of Findings.
    - (a). Approach
    - (b). Interpretation
5. Action
    - (a). Dissemination
    - (b). Impact on College Programs (Actual or Planned Modification and Change).
6. Recommendations for Design of Future Employer Follow-up Activities.

SAM-EMPLOYER FOLLOW-UP SAMPLE QUESTIONNAIRE

1. Layout and Design - Top third of form is perforated for easy tear-off. This can be removed:

   a. By the Employer if mail contact only is made.

   b. By the Interviewer and handed to the employer for reference at the outset of the interview when a personal interview is the contact method.

   c. By the Interviewer OR Scheduler and mailed to confirm the appointment when a personal or telephone interview is the contact method.

   The reverse side of this panel includes the employer's address and college logo and return address when the questionnaire is of the self-mailer design.

2. Rated items are located on the middle third of the form both front and back for separation from open-end if this is more convenient for tabulating. The middle third also includes coded information the college needs for identifying the program, student profile, employer, and any other data that may be a desired outcome for the follow-up. Program and/or cluster professionals should be involved in identifying the categories of responses that might be desirable for their programs which would require coding.

3. The lower third includes open-end questions to which the employer is asked to respond. As is noted above, this portion can be removed for tabulating or for disseminating to division or department chairpersons for input for their programs.

   The reverse side of the lower panel includes the college address for return mailing and space for address correction by the employer. It may be desirable to use envelopes rather than a self mailer.

4. It is suggested that the form be typed and then reduced to an 8½" x 11" or 8½" x 14" size for convenient handling.

An example of this suggested format is attached.

Questionnaire Layout
Employer Follow-up

(LIST OF STUDENT (S) EMPLOYED)
(A Separate Form Should Be Used
for Each Cluster or Program)

(COLLEGE MESSAGE)

PLEASE REMOVE BEFORE RETURNING

(Coding
Information)

(Rated Questions)

District
College
Cluster
Program
Student
  Sex
  SAM Class
  Ethnic
  Age
  Veteran
Employer
  Job Title

(OPEN END QUESTIONS)

Over PLEASE....

(Employer Return)
(Address Correction Requested)

METERED
Return or Stamped

(COLLEGE ADDRESS)

(RATED QUESTIONS)

(COLLEGE RETURN)

(EMPLOYER ADDRESS)

SAM EMPLOYER FOLLOW-UP QUESTIONNAIRE COPY SUGGESTIONS
(This information is to be read by or to the employer)

TOP PANEL

Left Side:

According to the information provided by the person(s) involved, the individual(s) listed below are currently employed by your organization. Our interest is not in their personal performance on the job. ABC College is concerned about the job preparation training our college provides.

NAME	JOB TITLE	OCCUPATIONAL PROGRAM

Right Side:

College Logo - PROJECT SAM (Student Accountability Model)

ABC College is interested in finding out how employers feel about the occupational training our college provides. We also ask former students who are now employed what they think. In fact, it is the students who give us the employer's name and their permission to ask a few questions. The person(s) listed at the left gave us your name. What we want to know is how our programs should be changed or redirected to meet your needs. With your input and that of other employers and former students, we hope we will do a better job of preparing present and future students for their chosen occupations.

Please take a few minutes to answer these questions. Additional comments and suggestions would be greatly appreciated.

If you would like a copy of the completed survey, please check the appropriate box on the back of this form.

Thank you for your help!

SAM EMPLOYER FOLLOW-UP

RATED QUESTIONS

FRONT - Middle Third
Please specify job title(s) to which this information applies. ______________________

TECHNICAL SKILLS

	Essential	Non-Essential	Excellent	Good	Acceptable	Below Expectations	Poor
How would you rate the overall effectiveness of the technical training provided by our college?			___	___	___	___	___
Please identify which of the following are essential or non-essential to this job in your organization. How would you rate the effectiveness of our college in training for each of these. Space has been provided for you to list and rate training in specific skills essential for the job.							
a. Technical Knowledge	___	___	___	___	___	___	___
b. Operation of Equipment	___	___	___	___	___	___	___
c. Writing Skills.	___	___	___	___	___	___	___
d. Verbal Communication	___	___	___	___	___	___	___
e. Computation Skills	___	___	___	___	___	___	___
f. ______________	___	___	___	___	___	___	___
g. ______________	___	___	___	___	___	___	___
h. ______________	___	___	___	___	___	___	___

BACK - Middle Third

How would you rate the effectiveness of our programs in preparing individuals for pre-employment procedures? (i.e., the interview, the application, personal presentation).	___	___	___	___	___
How would you rate the effectiveness of our programs in orienting individuals to employment? (i.e., work attitude, attendance, cooperation with co-workers and with management).	___	___	___	___	___

	Very Important	Moderately Important	Of Little Importance	Unimportant
How important is college occupational training in relation to other qualifications you consider in making the hiring decision?	___	___	___	___

Would you hire one of our graduates for a future job in your organization? Yes ____ No ____

____Please send a copy of the completed survey.

OPEN - END QUESTIONS

FRONT - Lower Third

What, in your opinion, is the major strength of the occupational training provided by ABC College?

What, in your opinion, is the greatest need for improvement in the occupational training provided by ABC College?

What additional comments or suggestions do you have for ABC College's occupational training programs?

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